Infantry

July-December 1997

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Infantry

July-December 1997 **Volume 87, Number 3**

DEPARTMENTS

COVER: Soldier of the 3d Battalion, 23d Infantry Regiment, 2d Infantry Division, fires his M-1 carbine at Hill 400, near Kumhwa, Korea, 31 December 1951.

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Commandant's Note

MAJOR GENERAL CARL F. ERNST Chief of Infantry

Forced Entry and the Contingency Force

Much has been published in the past few years regarding Force XXI operations, structure, and equipment. Within the last year, our Army under TRADOC leadership has concluded brigade and division warfighting experiments to determine how we will look and fight in the next century. I sometimes hear that this is all about "heavy." This perception does not recognize the participation of light Infantry in the brigade Advanced Warfighting Experiment (AWE), which was preceded by a light AWE at the Joint Readiness Training Center (JRTC) in 1995 (Focused Dispatch). The Force XXI experimental axis continues and we are now positioned for a series of technology demonstrations and programs with a primary emphasis on light and contingency based forces that will culminate in a major AWE. That is the focus of this note.

First, some general assumptions on potential threats and our ability to meet them over the next two decades: We know that various regional powers are experiencing rapid technological growth and a commensurate increase in military capabilities, at a time when our own military force is shrinking and we have fewer units forward positioned to respond to regional contingencies. In a recent report, the National Defense Panel warned that "We must be able to project military power much more rapidly into areas where we may not have stationed forces...." It is clear we must plan and train in order to project flexible, survivable combat power anywhere in the world on short notice, and we must be able to sustain and reinforce deployed forces as needed. This means we must be able to rapidly deploy Infantry as part of a combined arms team from home station—when required by regional commanders-in-chief—to hot spots overseas quickly and with the right equipment. Such an undertaking is both demanding in its preparation and crucial in its execution: demanding in terms of coordination, training, and expense and crucial because it allows our national command authority to respond to challenges to our national interests with appropriate force when necessary.

A second assumption in some contingency operations is that forced entry is the only way into the area of operations, and when it comes to executing the close, personal, and brutal fight required in forced entry operations, no one does it better than U.S. Army Infantry. In these types of operations, we will have one—and only one—chance to do it right the first time. This requires the right equipment, training, and mindset to get in fast, hit hard if necessary, and then leave rapidly when the job is done, or receive following forces.

The final assumption—based upon both recent experience and practical considerations—is that any forced entry contingency operation will be part of a joint force. This is not a new concept. We have drawn upon the capabilities of our sister services throughout our nation's history, and we must continue to develop doctrine and training which fully exploits their capabilities.

Contingency based operations including "forced entry" is one of the highest priority initiatives at the Infantry School. In July, 1997, our Dismounted Battlespace Battle Lab (DBBL) assumed proponency for all forced entry and early entry tactical functions from the former Early Entry

Lethality and Survivability (EELS) Battle Lab at Fort Monroe, Virginia. The DBBL provides the overall direction, oversight, and horizontal integration necessary to enhance combat and force development capabilities for future early entry operations and focuses on optimizing both the lethality and the survivability of forces involved in early entry missions. This will also include improving our ability to deploy forces on short notice, the inclusion of Special Operations Forces in planning for early and forced entry operations, and the development and training of the right mix of forces for contingency missions.

In preparation for future contingency missions, we have begun work on a Joint Contingency Force AWE scheduled for Fiscal Year 2000/2001. This AWE is designed to draw together, synergize, and test many of the emerging concepts, technological advances, and programs from agencies and services we expect to be involved in the conduct of forced entry contingency force operations. The contingency force AWE will focus on evaluating technologies, doctrine, and organizations available to a joint task force (JTF) given the mission to conduct forced entry and follow-on operations. We will use the AWE results as we integrate Army light and contingency forces into Force XXI. We also plan to closely examine joint logistical initiatives that can enhance our ability to sustain contingency forces. Another benefit of the AWE is the opportunity to exercise command, control, communications, computers, and intelligence (C4I) links between members of this joint service force.

The AWE will also leverage other programs and experiments to integrate lessons learned and other results to streamline contingency plan SOP's, training, and doctrinal literature. One such program, the Rapid Force Projection Initiative (RPFI), will be conducted at Fort Benning during July and August, 1998, and linked to other simulation sites around the country. It will include selected elements of the XVIII Airborne Corps and a brigade of the 101st Airborne Division (Air Assault). The AWE is designed to demonstrate potential technology solutions for early entry forces in the areas of survivability, lethality, target acquisition, and battle tempo. New technologies that will be exercised during the RFPI include the High Mobility Artillery Rocket System (HIMARS), Lightweight Digital Tactical Operations Center (LDTOC), Enhanced Fiber Optic Guided Missile (EFOGM), and the Remote Sentry target acquisition system.

The increasing urbanization of the world's developing countries brings with it the reality that early entry scenarios are likely to involve military operations on urbanized terrain (MOUT). For this reason we scheduled a MOUT advanced concept technology demonstration (ACTD) with the Army as lead (via the Infantry School), partnered with the U.S. Marine Corps (USMC). This ACTD started with a series of experiments that complement the work of the RFPI and contribute to the development of technologies to improve the lethality and survivability of soldiers in urban and other restrictive terrain. The MOUT ACTD started in January of this year and will last until FY 2000. It will culminate in a demonstration exercise that will provide the foundation for the contingency force AWE. This ACTD will coincide with an extensive Defense Advanced Research Project Agency (DARPA) program based on "Small Unit Operations" in close terrain including MOUT, for which we are once again the lead in a joint effort.

The National Defense Panel concluded that contingency forces will be increasingly combined arms, will most likely be a joint effort involving all four services, and will be multinational to the greatest extent possible. We concur in this assessment, and, with that in mind, our DBBL has been working closely with the USMC Commandant's Warfighting Lab, which is conducting its own experiments while supporting the MOUT ACTD. The Contingency Force AWE will draw heavily upon the lessons learned in the Marine Corps experiments and will leverage the latest technological advances in the fields of airborne satellite communications relay, long haul communications, unmanned aerial platforms, and decision aids.

Sooner or later, the Infantry, as part of a joint contingency force, will once again be called upon to project American combat power to protect American vital interests and or citizens. We must be ready to move swiftly, strike hard if necessary, and redeploy once our mission is accomplished. The integration of previous warfighting experiments, advanced concept technology demonstrations, and other technological programs and projects into a capstone advanced warfighting experiment will allow the Infantry Center to develop equipment, doctrinal, and training innovations required to respond across the warfighting spectrum. This will ensure tomorrow's Infantryman can deploy when called, quickly establish a foothold, and—if necessary—overcome, and subdue enemy forces around the world. Hooah!

INFANTRY LETTERS

PEOPLE ARE OUR GREATEST ASSET

Major General Ernst has hit the nail on the head: The infantry squad *is* the key to battlefield success and *does* require 11 men to be effective over the course of protracted operations (*see Commandant's Note, INFANTRY, January-February 1997, pages 1-2).* My light training in the 10th Mountain Division and training advisory experience in Latin America in the Army Special Forces, as well as two light/heavy rotations at the National Training Center and two more at the Joint Readiness Training Center, have taught me well what austere, extended operations are.

The most important lesson learned is that people are our greatest asset. There will be attrition, and the squad and platoon must continue to fight and function despite almost certain losses in personnel and equipment. A nine-man squad that goes to the field with seven men—and then after a few days drops to five or six—can no longer effectively fire and maneuver; and the platoon can no longer adequately man key weapons without pulling more men from its squads. Ultimately, the ability of the squad and platoon to react and conduct fire and maneuver effectively is impeded to the point of endangering both the men and the mission.

A 34-man platoon can go to the field with 22 men in a training event using MILES (multiple integrated laser engagement system). But when the threat is real on a conventional (or unconventional) battlefield, 11 men instead of nine will mean the difference between success and failure. Operations other than war, peacekeeping operations, protracted deployments, independent and self-sustaining operations in all areas of the globe are part of the current infantryman's mission.

As General Ernst says, the squad must be resilient in its organization and function to meet its diverse mission requirements. The infantry squad on the ground faces a very real and personal battle; ask any current or former infantryman who has marched in muddy, wet boots along a rain-soaked road at night with a heavy rucksack. Let's give our infantrymen what they need to defeat the enemy—an 11-man squad.

BERNARD R. SPARROW
MAJ, Special Forces
Fort Bragg, North Carolina

WE NEED A 13-MAN SQUAD

I read the Commandant's Note in the January-February 1997 issue and wanted to send you my thoughts on the rifle squad.

The nine-man squad is too small. Although I believe the four-man fire team is the right size, we need to go to a 13-man, three-fire-team rifle squad like the one the Marine Corps uses. This squad will give us more flexibility in its employment, increase its ability to conduct fire and movement, and have the additional manpower to carry all the gear we are issuing to soldiers—night-vision equipment, batteries, radios, additional ammunition for machineguns and mortars.

A significant increase in the strength of the squad will have a high cost (for personnel and equipment, especially night-vision items), and we will have to pay it. The recent effort to reduce the grade structure of our NCO corps was a step in the right direction, but it did not go far enough. The current Army rifle squad has a staff sergeant squad leader and two sergeants to supervise the six other soldiers. We need to adopt the same grade structure as the Marine Corps. The squad leader should be a sergeant and the team leaders hard-stripe corporals. The only specialists in the rifle platoons should be the radiotelephone operators and the machinegunners.

The other problem is that we have way too many officers in the Army. We need to reduce that number significantly, and to do this we have to cut the number of headquarters units and major Army commands. These headquarters are supervising fewer and fewer units and soldiers and are often redundant. In the headquarters that remain, we need to use NCOs in many of the staff positions that are now authorized officers.

We can use the money saved by these measures to help pay the bill for the increase in rifle squad strength. We also need to go after the personnel spaces that other branches will no longer need. In some of the other branches, weapon systems will be crewed by fewer soldiers, and units can be smaller. The infantry will still be people-intensive and can use those personnel spaces.

Two other things: The 60mm mortar squad is also too small. We need at least five soldiers to operate effectively. Finally, the two-man machinegun crew in a light battalion is not big enough. The crew needs to be authorized three men in all types of rifle platoons.

MIKE DAVINO
MAJ, U.S. Army
Honolulu, Hawaii

WE NEED A WEAPONS SQUAD

I agree with Major General Ernst that we need a larger infantry squad. But above all else, we need a weapons

squad with dedicated NCO leaders.

During the past year, my unit (Company A, 1st Battalion, 501st Infantry) has experienced a drastic reduction in the number of its assigned personnel. With 129 allowed under our TOE (tables of organization and equipment), we were being manned at only 80 to 90 soldiers. To overcome this manning problem, we went to two squads in each platoon and used the other staff sergeant and his two sergeants to form a weapons squad. This accomplished three objectives: First, it gave the leaders who did not have any soldiers someone to lead. Second, it increased the command and control of our key weapons. And finally, it freed the platoon sergeant to concentrate on the "big picture." The good news is that we are slowly gaining soldiers (now at 109), and our squads are filling up. As we fill the third squad to fighting strength, the M60s will once again revert to the platoon sergeant's control.

As a former platoon sergeant, I feel that this position should be with the maneuver element so the platoon sergeant can assume control if needed. According to our current TOE, we are unable to free the platoon sergeant from the support-by-fire position during the attack. For this and other reasons, I feel that we need a weapons squad with dedicated leaders.

BYRON BARRON
1SG
Fort Richardson, Alaska

TOMORROW'S INFANTRY

I am responding to Major General Carl F. Ernst's request for input on the makeup of the infantry squad of the future. First, a bit about my credentials so you will understand the experience I bring to this subject. I entered the Army in February 1964 by way of the Army National Guard. I was in an infantry battalion organized under the 7-15E TOE. We were "straight leg," and this was long before there were any "light" infantry units. At that time the Army had mechanized (M113s), straight leg (mostly in the National Guard), and airborne. I don't recall any Ranger battalions at that time, though there may have been some.

The 7-15E TOE gave way to 7-15H and finally to the modified TOE. (Yes, there actually was a time when units, even in the Reserve Components were organized at full strength.) Over the years, I have been called to duty in a number of situations by state or federal authority. In addition to leg infantry units, I have also served in mechanized infantry (M113s), armor, and artillery. I have served as an operations sergeant, intelligence sergeant, and first sergeant of a rifle company, and retired this year as command sergeant major of an infantry battalion.

I was ordered to active duty in 1968 for the civil disturbances in Baltimore; performed anti-looting duty many times; civil disturbance duty during the Vietnam War; I guarded a maximum-security state penitentiary and more.

I have trained with active duty units and personnel many times during my career, taking my battalion to Panama twice. In short, I think I know infantry as well as anyone and have long-term institutional knowledge.

We need to take another look at the good old "straight-leg" infantry. It has been so long since leg infantry was part of the Army that everyone has completely forgotten about it. We think in terms of mechanized and special-purpose—that is, airborne, air assault, light. The issue is not really one of organization but one of mission, and that is where we need to reconsider "leg" infantry.

Today, the Army needs units that are flexible and can be tailored to any environment—low-intensity conflict, high-intensity conflict, peacekeeping, and the like. Infantry (by which I mean, "leg") can be airmobile, and it can be light, simply by leaving some equipment behind. (We did not train for all light missions and still should not; the light units can do that).

What should be the size of the infantry squad? I believe it should be 11 men—one squad leader (staff sergeant), two team leaders (sergeants), two automatic riflemen armed with the squad automatic weapon, two grenadiers using the M203, and four riflemen. (See TOE 7-15H for the complete organization; I believe I still have a copy if one is no longer available through normal channels.)

Why do I support this organization? Because ground cannot be held without troops! In planning a mission, we have to realize that no unit is going to be at full strength, even in peacetime. We have to acknowledge that we will have illness, schools, turbulence, and, quite possibly, casualties.

The size of the rifle squad in a mechanized unit will always be limited by the ability of the armored fighting vehicle to carry troops. We have to plan for at least five soldiers in the maneuver element and then determine the strength of the squad by counting backward. Given that, the squad needs two BFVs with squad leader, two drivers, two gunners, one maneuver team leader, one automatic rifleman, two riflemen, and one grenadier. The dismount team is divided into the two BFVs.

Infantry platoons should have a weapons squad, consisting of two M60 machinegun teams of three men each and two antitank teams. It is imperative that this organization have a squad leader who can train the teams. Otherwise, these will be delegated to someone else, and training will suffer. The squad leader can also be an assistant platoon sergeant, if necessary, and help run the platoon when his teams are deployed.

The company has a mortar platoon of three 81mm mortars, with appropriate staffing for company fire support missions. The unmodified TOE shows the parts of the battalion above platoon. I would like to point out that this organization is very sustainable with its organic troops and equipment; modifying the TOE would bring us right back to where we are today.

In summary, I recommend that the Army return some number of infantry battalions (TOE 7-15H) to the force to accomplish the many missions that may arise where boots on the ground are a

prerequisite, to supplement current mechanized units and take deployment burdens off them. These units have firepower that is lacking in light, airborne, and Ranger units. Staff them with full-strength 11-man squads, and give them the truck support included in the TOE. A battalion becomes 100 percent mobile when augmented with a platoon of 2½-ton trucks.

Mechanized infantry should have 11 men with six needed to support the five-man dismount element.

ABE STERNBERG

TRAINING FOR NONTRADITIONAL MISSIONS

The past 10 years have seen the United States Army employed in many nontraditional roles. In previous years, we referred to these missions as low-intensity conflict; that euphemism fell from favor when we realized that soldiers were still at risk of getting killed in a low-intensity mission. The term has now evolved into *stability and support operations*. This encompasses everything from restoring democracy to other nations to hurricane relief right here in the United States.

The Army's purpose has been and always will be to fight and win our nation's wars. But the employment of the Army in roles that do not involve actual conflict is just as necessary to world stability and peace. The Army has the ability to provide services that no other agency can provide, which makes it ideal for operations similar to the hurricane relief missions regularly performed in the southern states. No other organization can deploy and sustain itself in the same manner. The same tenets of professionalism and leadership apply to those soldiers who are away from their families even if they are not fulfilling the traditional warfighting role.

The infantryman will continue to bear the brunt of the workload in these operations, just as he does in combat. If anything, these operations will place a greater strain on small-unit leaders as they face unfamiliar rules of engagement and the need to exercise more restraint. Training needs to reflect these changing demands.

Here at the United States Military Academy, cadets undergo a weeklong continuous field exercise in which we focus on light infantry tactics in a limited war scenario. In response to the changing dimensions of the modern battlefield, the Department of Military Instruction has created a scenario that depicts the world today. The department has introduced civilians to the battlefield, some armed and some not, who must be appropriately dealt with. Happening upon an observation team from a fictitious neutral nation is not uncommon, and we as leaders are faced with the difficulties of a battlefield on which the players and the noncombatants are not clearly defined.

What lessons can we take from such training, and what value does it have for others who may want to try similar training? It makes leaders think outside the box. Decisions are not clear-cut, and there is no field manual in the world that tells the young leader what to do when encountering civilians who may or may not be armed and who don't speak our language. It also teaches us that the world we are entering is complex and confusing, and that a lone squad leader who elects to exercise restraint in the face of perceived hostility can affect the outcome of our entire foreign policy with another nation. The world has changed, and we must be willing to change with it.

PAUL D. CARRON
Cadet, USMA
West Point, New York

AUDIE MURPHY RESEARCH FOUNDATION

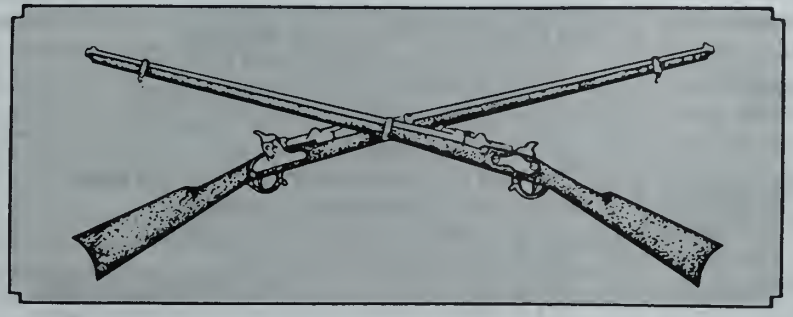
The Audie Murphy Research Foundation is trying to locate veterans who served with Audie Murphy in World War II and who would be willing to contribute their recollections, information, or photographs to this historical preservation and education effort.

Audie Murphy often said that "the real heroes never came home" and agreed to write his biography, *To Hell and Back*, so the men he served with would not be forgotten.

The Foundation's first newsletter contains Audie Murphy's account of Staff Sergeant Sylvester Antelok's Medal of Honor action that cost him his life. Terry Murphy is personally interviewing men his father served with and letting them tell their stories in their own words.

The Foundation's address is 118008 Saratoga Way, Suite 516, Santa Clarita, CA 91351; telephone (805) 272-0780.

LARRYANN WILLIS
Executive Director
Audie Murphy Research Foundation



INFANTRY NEWS

THE 75TH RANGER REGIMENT is looking for motivated soldiers in the following MOSs: 11B, 11C, 11Z, 13F, 31C, 31U, 31Z, 35E, 54B, 63B, 71D, 71L, 71M, 73D, 74C, 75B, 75H, 79S, 88N, 91B, 92A, 92G, 92Y, 96B, 96D, 97B.

All volunteers must be active duty, male, U.S. citizens who are airborne qualified or willing to attend airborne school. All soldiers must pass an indoctrination and orientation program before assignment to the Regiment. Soldiers who are assigned to the 75th Regiment, regardless of MOS, are eligible to attend the Ranger course, with their unit commander's approval. Numerous MOSs within the regiment qualify a soldier for special duty assignment pay.

Trainees from Basic and Advanced Individual Training should use their chain of command to contact the 75th Ranger Regiment, Ranger Liaison, at (706) 545-2617 or DSN 835-2617.

Soldiers currently serving at an Army installation may submit, through their chain of command, a completed DA Form 4187, requesting reassignment to the 75th Ranger Regiment. A copy of the form, along with copies of DA Forms 2A and 2-1, and the most recent DA Form 705, should be sent to Commander PERSCOM, ATTN: TAPC-EPMD-EPK-I (Ranger Team), Alexandria, VA 22331.

For more information contact Ranger Branch, Total Army Personnel Command, 75th Regiment Liaison, (703) 325-5566 or DSN 221-5566; e-mail: pallistd@hoffman-emh1.army.mil.

A MONUMENT to the 70th Infantry Division was dedicated at Fort Benning, Georgia, in October 1997. The monument, funded by the 70th Division Association, is on Sacrifice Field near the National Infantry Museum.

This monument is a duplicate of one in France, placed by the town of Spichern in honor of the division. The 70th Division liberated this strategic ground on the French-German border in the spring of 1945.

A NEW PARACHUTE FLIGHT training simulator is being used to train U.S. Air Force air crews. These air crews receive maneuverable parachutes for use in emergencies, but the crewmen don't have the training or jump options that are available to operational parachutists—such as landing terrain, wind maximums, hostile locations, and time of day or night.

The system combines a virtual reality, head-mounted display and tracker with the latest developments in low-cost, high-quality, three-dimensional texture-mapped graphics. This produces a realistic environment that allows a crewman to track and avoid obstacles and to see malfunctions overhead. The simulator provides immediate assessment and solution of any canopy deployment problems and allows the user to set up and fly a landing pattern while scanning in all directions for other crew members, obstacles, or hostile forces. Specific mission terrain can also be created from digital map data.

THE RANGER COURSE news item that appeared in INFANTRY's March-June 1997 issue (page 7) contained an error in the home page address, which is: www.benning.army.mil/rtb/rtbmain.htm

In addition, the item should have said that only soldiers in the following MOSs are eligible to attend the course:

11B—Infantryman
11C—Indirect Fire Infantryman
11H—Heavy Antiarmor Infantryman
11M—Fighting Vehicle Infantryman
12B—Combat Engineer (in companies that directly support infantry battalions)
13F—Fire Support Sergeant (habitually associated in direct support in Infantry battalions)
18B—Special Forces Weapons Sergeant
18C—Special Forces Engineer Sergeant
19D—Cavalry Scout
19K—Armor Crewman
Enlisted soldiers of any MOS or specialty who are assigned to Ranger-coded positions within the 75th Ranger Regiment or Ranger Training Brigade.

THE 29TH INFANTRY REGIMENT at Fort Benning has moved some of its elements and changed some telephone numbers since the Infantry School Directory was printed in INFANTRY's March-June 1997 issue.

The following will update the 29th Infantry entries in that directory.

29th Infantry Regiment	
Commander, COL Richard J. Rowe, Jr.	784-6411
Maintenance Management Division	784-6517
1st Battalion, 29th Infantry Regiment	835-8667
Co A (BIFV Company/USAIS Support)	835-7536
Co B (BIFV Company/USAIS Support)	835-7582
Co C (BIFV Company/USAIS Support)	835-7476
Bradley Instructor Company	784-6394
Bradley IFV New Equipment Training Team	784-6498
2d Battalion, 29th Infantry Regiment	835-8516
Co A (Land Navigation Committee)	835-7798
Co B (Antiarmor Committee)	835-7529
Co C (Small Arms Committee/Marksmanship)	835-7507
Co D (Mortars/New Equipment Training Team)	835-7697

THE EXPERT INFANTRYMAN Badge (EIB) was established in October 1943 to recognize the soldiers who had attained the high standards desired for Infantrymen in World War II and to foster esprit de corps in Infantry units. Soldiers who have earned the badge since that time have had to prove that they could maintain their weapons and be physically strong, mentally quick, and emotionally tough. They also had to be expert in the increasingly critical individual skills of modern-day Infantry soldiers.

Today, the EIB test is a tool that leaders use to measure Infantry soldiers' level of competence in the selected critical individual skills they will need to succeed in combat. The U.S Army Infantry School has recently revised the EIB pamphlet to standardize the EIB test.

The test now consists of 19 stations with a total of 38 possible individual tasks. The standards for these tasks are taken from the current Soldier's Manuals and Common Task-related publications.

All eligible candidates must take the EIB test with a battalion-size unit or larger. Active Army Infantrymen take the test in an outside location over a period of five consecutive days. National Guardsmen and United States Army Reservists, not on active duty, must compete the test in one of the following ways: Three consecutive inactive duty training (IDT) periods that do not exceed five total testing times, or five consecutive days during annual training.

A testing unit may not award the EIB to any soldier not assigned or attached to that unit, and a unit not conducting the EIB test may not publish orders awarding the EIB. Assignment or attachment to a testing unit for the sole purpose of testing is permissible, but only for personnel assigned to units that are not authorized to conduct the EIB test. Commanders at battalion level or higher may allow their soldiers who have failed the EIB during one testing period to test with another unit during a different testing period.

To be eligible for the EIB, the candidates must meet prerequisites before the start dates of the EIB test. They must complete these prerequisites within one year before taking the test, unless indicated otherwise. The unit commander signs a roster of candidates for the EIB and provides it to the EIB board president.

To be eligible, a candidate must meet the following criteria:

- Be an active member of the United States Army, USAR, or ARNG.
- Have a primary MOS in CMF 11 or 18B, 18C, 18E, 18F, or 18Z; be a warrant officer identified as 180A; or be a commissioned Infantry or Special Forces branch officer. An officer detailed by the Total Army Personnel Command to the branches of Infantry or Special Forces is eligible only while detailed and serving in an Infantry or Special Forces assignment.
- Volunteer for EIB testing.
- Meet the standard prescribed in Army Regulation 600-9, *The Army Weight Control Program.*
- Be recommended by current unit commander.
- Qualify as expert with the M16A1 rifle or the M16A2 rifle/M4 carbine using field fire for record or the equivalent in accordance with Field Manual 23-9.

The EIB program and test are outlined in detail in U.S Army Infantry Center Pamphlet 350-6, dated September 1997, which was distributed to major commands in October 1997. The units now can extract the Expert Infantryman Badge Test, USAIC Pamphlet 350-6, from the Infantry Home Page http://-www.benning.mil .

Supplementing the pamphlet is a new EIB videotape that will help Infantry leaders and trainers set up and administer the test properly and prepare their soldiers to compete more effectively and earn the badge. This tape demonstrates the proper procedures for conducting the test and shows how each task is performed.

To prepare their soldiers for the test, commanders should make every effort to integrate the EIB tasks into their individual and collective training programs. They should place special emphasis on sustained physical fitness and land navigation training.

The EIB streamer is awarded to Infantry or Special Forces units in which 70 percent or more of the soldiers assigned during the EIB test period are awarded the EIB. The unit may then display the streamer for one year.

Commanders are required to notify the Infantry School three months in advance of their EIB test periods and submit after-action reports to the School within 15 days after their units have completed the test. The report must include the number of soldiers tested, by task, the number who passed each task, and the number who earned the EIB. The School will use this data to study possible future changes to the EIB program and test and to determine which tasks, if any, may need to be revised.

As time passes and the number of soldiers who hold the Combat Infantryman Badge diminishes, we need to look even more to soldiers who have earned the EIB for the high degree of individual all-round proficiency that today's Army requires. The Commissioned Officers and Noncommissioned Officers in today's Army must encourage all Infantrymen to train to the EIB standards, so that they can successfully complete the test and be recognized as Expert Infantrymen. Our uppermost responsibilities will always be tactical and technical proficiency.

Commanders at all levels must improve their individual and collective training programs so they can train their soldiers toward the goal of attaining the Expert Infantryman Badge, and more important, the goal of attaining success in combat. The overall percentage of soldiers who volunteer to take the test and attained the EIB has increased. For example, the average passing rate in 1992 was 20.3 percent; in the 1997 it is 45 percent.

The EIB is a tough but attainable goal that today's Infantryman should strive to achieve. When a soldier is finally awarded the EIB, he joins the ranks of a select group of professionals—the Infantrymen whose determination and combat readiness are symbolized by the coveted Expert Infantryman Badge.

PROFESSIONAL FORUM

Modernizing the Airborne

STANLEY C. CRIST

In the years preceding World War II, the combat triumvirate of the U.S. Army was composed primarily of foot-mobile infantry, towed artillery, and a handful of light tanks. The onset of hostilities, however, was the catalyst for a modernization effort that would dramatically change the organization, training, and equipment of U.S. ground forces. The Army transformed itself, from a force trained and equipped for the static nature of World War I, into one well adapted to the high-mobility demands of blitzkrieg.

The increased use of truck transport allowed the infantry to be moved about the battlefield much faster, although only when out of contact with the enemy. To overcome that problem, the thinly armored M3 "half-track" was developed, which provided improved cross-country ability and some degree of protection from small arms fire, although its open-top design left it vulnerable to artillery airbursts. In the 1960s the creation of the M113 armored personnel carrier (APC) produced another leap ahead in mobility and protection, thanks to its full-tracked, completely enclosed configuration. Two decades later, the adoption of the M2 Bradley infantry fighting vehicle (IFV) gave the U.S. infantryman even greater combat capability.

The artillery branch evolved in a similar fashion over the past six decades, going from completely unprotected, towed artillery pieces to improvised mountings of howitzers on half-tracks and tank chassis, to purpose-built self-propelled guns such as the M109A6 Paladin. The tank force, which began with combat vehicles that were inadequately armored and woefully undergunned, now fields the best main battle tank (MBT) ever made—the M1A2 Abrams.

When the 82d Airborne Division was activated in 1942, it was primarily made up of foot-mobile infantry, with a few small-caliber, towed artillery pieces—and no tanks.

The history of the airborne stands in stark contrast to the progress of the infantry, artillery, and armor. When the 82d Airborne Division was activated in 1942, it was made up primarily of foot-mobile infantry, with a few small-caliber, towed artillery pieces—and no tanks. The 82d has changed little since its inception half a century ago. It is still mainly a light infantry force, with a small number of towed howitzers for support; it also has some additional combat power in the form of TOW missile launchers mounted on HMMWVs (high-mobility multipurpose wheeled vehicles) and a single battalion of M551A1 Sheridan light tanks. Essentially, the paratroopers are stuck in World War II mode, while "leg" infantry is becoming a 21st Century force, having advanced from foot mobility to truck, then half-track, APC, and IFV.

The traditional role of paratroopers is to drop into the enemy's rear area, seize critical objectives, and hold on until relieved by conventional ground forces. This linkup must occur quickly to achieve mission success and paratroop survival. A prime example of the inherent weakness of this strategy is Operation *Market Garden* (September 1944), in which British and Polish airborne forces were annihilated by German Panzer units while attempting to capture and hold Arnhem bridge. Many paratroopers were killed, wounded, or taken prisoner, in large part because they were outclassed in firepower, armor protection, and mobility: They couldn't run, they couldn't hide, they had precious little with which to fight, and the relief force failed to reach them!

As a consequence of similarly bitter wartime experience—along with some thoughtful, farsighted analysis—the Russian (formerly Soviet) General Staff eventually concluded that airborne units must have the means to conduct operations without the need to link up with

ground troops. Doing this meant giving the paratroops roughly the same degree of tactical and technological advantage enjoyed by the heavy forces. The result was the introduction in 1970 of the BMD airborne combat vehicle (ACV), which enabled the innovative creation of the world's first fully mechanized airborne force.

Somewhat ironically, the parachute-deliverable M113 APC had entered production a decade earlier, a fact that would have permitted the modernization of U.S. airborne forces ten years before their Russian counterparts.

Curiously, the interest—and the vision—has been lacking in this country. Instead of embracing mechanization as a means of expanding and enhancing their warfighting capability, the U.S. airborne community seems to decry the concept stating two basic reasons: "There is not enough airlift," and "We can fight heavy forces successfully in all but the most open kinds of terrain, so why make a change that would rob us of our strategic mobility?" These issues are certainly serious enough to merit examination and analysis in an effort to determine their validity and provide possible alternatives.

Not enough airlift? If this is true, the obvious answer is, "Get more!" If, however, politico-economic factors prohibit the acquisition of additional transport aircraft for this purpose, then what options are available that could be implemented with existing airlift assets? Just how many transports would actually be required to lift a mechanized airborne force? Before answering these questions, it is first necessary to know the basic specifications of the airborne combat vehicle.

The Vehicle

Although it would be desirable to develop a state-of-the-art ACV family—an airborne combat system (ACS)—budget constraints would doubtless prevent it. Fortunately, a vehicle currently in service—the M113A3 APC (and certain of its variants) has most of the required characteristics:

First, with its small size and light weight, the M113A3 is capable of transport and low-velocity airdrop (LVAD, or "heavy drop") by all four major U.S. Air Force cargo planes—the C-130, C-141, C-5, and C-17; it can also be carried a short distance as a sling load by the CH-47D helicopter. The only other full-tracked, armored vehicle now in the inventory that has the same LVAD capability is the M551A1 Sheridan tank. If the Sheridans of the 82d's 3d Battalion, 73d Armor (originally slated to be replaced by the now-defunct XM8 armored gun system) are withdrawn from service as planned, M113 variants will be the Army's only tracked combat vehicles with full LVAD capability.

The M113A3 is a vast improvement over the previous M113s. A more powerful but more fuel-efficient turbocharged engine and a new transmission deliver automotive performance on a par with that of the Bradley fighting vehicle. Internal kevlar spall liners and external fuel tanks provide a great increase in crew survivability; mounting provisions for bolt-on armor packages make possible the upgrade of protection from the basic level (small arms, artillery fragments) to 14.5mm heavy machinegun, 30mm cannon, and rocket-propelled grenade (RPG) rounds. The M113A3's tactical mobility is further enhanced by its ability to swim across small bodies of water with little or no preparation.

While basic armament—a .50-caliber machinegun—is rather minimal for modern warfare, the elegant simplicity of the M113A3's boxlike structure makes it ideally suited to a "modular" approach to armament installation.

Weapons that can be mounted on the vehicle include the M2 .50-caliber heavy machinegun (HMG), the Mk 19 40mm grenade machinegun (GMG), the M60/M240B 7.62mm medium machinegun (MMG), the M40A2 106mm recoilless rifle, TOW, Dragon, and Javelin antitank guided missiles (ATGMs), 81mm and 120mm mortars (in the M125 and M1064 mortar carrier variants). Even the Hellfire missile has been fired from a modified M113 that was fitted with a prototype eight-shot turret assembly. With the exception of the multiple Hellfire launcher, the weapons listed can be mounted in various combinations according to mission needs. The following are some examples:

General Purpose/Urban Terrain. One GMG or HMG, one Javelin ATGM, two MMGs, and one LMG. Configuration allows maximum, continuous 360-degree observation and target engagement.

Direct-Fire Support (Version 1). One 106mm recoilless rifle, one 40mm GMG, and one 7.62mm MMG—a no-cost "armored gun system."

Direct-Fire Support (Version 2). Two 106mm recoilless rifles, one .50-caliber HMG. Spanish TC-7/106 one-man turret would provide armor protection for the gunner.

Antitank. Incorporates a two-man turret similar to that on the French AMX-10 HOT vehicle, with four ready-to-fire ATGMs—TOW, TOW follow-on, or Javelin.

Indirect-Fire Support or Antitank: M1064A3 self-propelled 120mm mortar has almost three times the lethality of 81mm mortar, six times that of 60mm mortar currently used by airborne. 120mm precision-guided rounds would allow engagement of enemy armor at extended range (7,000-plus meters) and in defilade.

Airlift Requirements

In addition to the paratroopers, an airborne infantry battalion has 20 TOW HMMWVs, 36 cargo HMMWVs, and 10 2½-ton trucks. The artillery battery has six HMMWVs to serve as prime movers for the M119A1 howitzers, the air defense platoon has four HMMWVs, and the engineer platoon has several pieces of heavy earthmoving equipment. Ten C-130s or eight C-17s would be needed to transport the 730 jumpers of the battalion task force. To airlift all of these vehicles and heavy equipment mentioned would require about 54 C-130s or 19 C-17s. An ACS battalion with, for instance, 45 M113A3s, nine M1064A3s, and six scout HMMWVs would need 57 C-130s or 19 C-17s. If the paratroopers were to "tailgate" the vehicles—jump from the same aircraft, immediately following the heavy drop load—the personnel aircraft would not be needed, thereby freeing eight to 10 airlift sorties. A mechanized force might require slightly more (C-130), the same amount (C-17), or even significantly fewer ("tailgating") aircraft for transport than does the current organization; this is quite contrary to the widely held belief that a mechanized airborne unit would require excessive airlift resources.

Organization

Two organizational approaches seem worth considering. One of these is to follow conventional practice and mechanize each battalion in all three brigades. This route would cost more to implement and would place greater administrative, logistical, and maintenance demands on the units, but it would also permit all nine battalions to be mechanized at the same time.

This configuration would have been very appropriate in August 1990 when

One organizational approach is to follow conventional practice and mechanize each battalion in all three brigades.

the entire 82d Airborne Division deployed to Saudi Arabia. There, in a landscape without cover and concealment or shade from the sweltering summer sun—and facing a mobile, armored opponent—the footmobile paratroopers could do no more than dig in and hold on until the heavy forces arrived. Fortunately, although the Republican Guard T-72s may have been superior to the World War II German Panthers and Tigers, the Iraqi soldiers displayed only a fraction of the competence—and none of the will to fight—that the Panzer crews showed at Arnhem, thereby avoiding a replay of that debacle.

Another factor to consider is the pending retirement of the M551A1 Sheridans. When the Sheridans are gone, the paratroopers will not have an armored gun system that can be parachuted into the drop zone alongside

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them. In a mechanized airborne force, however, some of the M113A3s could be equipped with recoilless rifles to provide organic direct-fire support; both the M40A2 106mm and the M3 84mm Ranger antiarmor, antipersonnel weapon system (RAAWS) could be used in this role. Although the M40A2 has greater range and lethality, the M3 is light enough for easy dismounted use should the need arise. There are a few M40A2s still in storage at Anniston Army Depot (28 serviceable, as of this writing), but the 106 has been manufactured recently by Israeli Military Industries, and the 3A-HEAT-T round made by the firm of BOFORS reportedly has twice the penetration of the conventional 106 round and can defeat explosive reactive armor. These options are clearly less than ideal, but they are still far superior to hand-held weapons such as the LAW (light antiarmor weapon) and the AT-4.

The other organizational approach is to have an autonomous ACS brigade within the 82d Airborne functioning in much the same manner as the 3d Battalion, 73d Armor. Indeed, the armor battalion is probably the logical choice to serve as the nucleus of the proposed ACS brigade. (This battalion could also initially serve as a battalion-size Airborne Experimental Force to test the concept in Advanced Warfighting Experiments.)

There would be a number of advantages to having a separate brigade. The infantry battalions would not be saddled with the added maintenance and supply efforts required by organic light armor, nor would the paratroopers lose their dismounted skills, because they would have the use of the M113s only for required training and maintenance and periodic operations.

This should not be viewed as simply an armored transportation brigade, however. Even though it would function in that role for operations requiring mechanized infantry, it has the potential for employment in a variety of roles and missions.

In a *Desert Shield* type of scenario, for example, the M113A3s could be configured as tank killers, with ATGM launchers installed for line-of-sight engagements, while M1064A3 120mm self-propelled mortars could have precision-guided mortar munitions for long-range and indirect-fire use. This configuration would need only four crewmen per M113, a substantial reduction in personnel requirements compared to the manpower-intensive infantry units. A single ACS brigade could field as much antitank firepower as two bri-

gades of parachute infantry—twice the combat power, with half the troops.

Class III supply (petroleum, oil, lubricants) would be about as demanding as for those same infantry brigades, but this should be mostly (if not completely) offset by the greatly reduced requirements for Class I (food) and water, the latter being as critical as fuel in a desert environment. The need for items in Classes II, IV, VI, and VIII should also be minimized because of the reduced number of soldiers.

As for deployability, only 22 C-5 sorties would be required to transport the brigade's 170-plus armored vehicles. A force of armored, high-mobility, high-lethality weapon systems could maneuver according to the evolving situation—instead of just sitting and waiting behind a "line in the sand" hoping the enemy would attack at the most favorable time and place.

During World War II, the available technology did not permit the mechanization of parachute infantry. The workhorse of the air fleet—the legendary C-47—was not designed for parachute delivery of light armor; and the existing APC—the M3 half-track—was too big and heavy to be airdropped.

With the postwar development of the C-130 and other, larger transport aircraft, and the adoption of the aluminum-hulled M113, the technological aspects of the situation changed. Unfortunately, the U.S. airborne community failed to take advantage of these new circumstances. Other nations have been more adaptive, however. Israeli paratroopers readily incorporate the M113 into their operations, making full use of the vehicle's tactical mobility and armor protection. The German airborne has recently added a mechanized antitank battalion—armed with the ultralight, helicopter-transportable Wiesel (TOW and 20mm cannon versions)—to its force structure. And, of course, the Russians have equipped several divisions with BMD variants.

These countries have taken the lead in adding a new dimension to airborne warfare. By combining the superior tactical potential of mechanization with the inherently unique advantages of vertical envelopment, they are creating parachute-deliverable forces capable of employment across the entire operational continuum. Since 1989 the U.S. Army has been downsized from 18 divisions to ten, and there is talk that end strength could be reduced even further. This smaller Army of the 21st century cannot afford large, special-purpose units. Every division needs to be equipped and trained to fight and win on all types of terrain, and across the entire spectrum of ground combat scenarios. If the 82d Airborne Division is to become a full-spectrum force, it must mechanize; failure to do so is an open invitation to military obsolescence and battlefield defeat.

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The Challenge of Command

And How to Meet It

COLONEL COLE C. KINGSEED

A few years ago, I was asked to address a Reserve Officer Training Corps awards ceremony to honor some of the outstanding men and women who will make up the ranks of the Army's future officer corps.

In considering what I might say to these young leaders, I reflected on my own experience as commander of a light infantry battalion and on the writings of this country's most successful military leaders. I entitled my presentation "Unsolicited Advice to a Leader Going to War" and discussed my observations of what constituted the success of the outstanding junior leaders I had encountered in more than a quarter century of commissioned service.

I offer my candid observations here in the hope that they may prepare today's officers and noncommissioned officers for the awesome responsibility of leading soldiers in combat.

To be a highly successful leader, you must prepare yourself for command. The start point lies with the individual leader. The commander of one mechanized company in the Persian Gulf war noted that his preparation began with the moral and ethical training he had received as a cadet. Central to his belief was his personal credo: "The leader of character in peace is the leader of courage in war." That theme governed his actions throughout the conflict. The way his company operated in the absence of direct supervision of officers, the way his unit treated enemy prisoners, and the way he personally directed his company, all rested on his intent to leave the battlefield with his soldiers and his honor. He soon discovered, not surprisingly, that his company had adopted his credo. The lesson here is that one commander can make an im-

portant difference. So don't sell yourself short.

In addition to personal professional development, you must also have a number of qualities, assuming you have good common sense, have studied your profession, are physically strong, and desire command. (The desire for command is important for today's infantryman. The Army is full of leaders who claim they want to command, but unconsciously or otherwise are unwilling to expend the required energy and effort. What distinguished Marshall, Eisenhower, and Patton from their contemporaries was their collective desire to seek command and their willingness to work toward that goal.)

Your willingness to accept the challenges inherent in commanding soldiers will determine your ultimate effectiveness.

Be willing to accept challenges. Like their World War II counterparts, today's leaders face many of the same trials and tribulations as yesterday's heroes. Your willingness to accept the challenges inherent in commanding soldiers will determine your ultimate effectiveness. Soldiers expect officers and noncommissioned officers to lead, and to lead from the front. As a battalion commander, I personally led monthly battalion road marches and payday three-mile runs. I usually joined the candidates for all Expert Infantryman Badge and Air Assault School field marches. My rationale was simple. Not only did I demonstrate to the soldiers my willingness to share their physical and mental hardships, but they saw that I was interested in what they were doing and was physically capable of traversing the same terrain over which I ordered them to march. The more senior the commander, the more important it is for soldiers to see him in the field.

Be willing to make difficult decisions. This is the essential quality that distinguishes a good leader from a good commander. It is easy to decide what a unit will do from one day to another. Any leader can do that, for his decisions are directed to a body of men, and in effect are somewhat impersonal. But the focus of a commander's decision is the individual as well as the unit. It is decidedly more difficult to deny an individual soldier's request to miss a specific field exercise, or quite possibly a deployment, in order to conduct personal business or handle a problem in his family than it is to order an entire unit to the field for training.

Let me give an example of this difference from my own command experience. One of the toughest decisions I made during my command tour was the relief-for-cause of one of my most outstanding platoon sergeants. The conflict revolved around the classic "mission versus men" debate that has plagued many a leader. This particular event occurred during the fifth day of an extended field training exercise when companies were conducting relief-in-place operations. It had rained torrents for four consecutive days and showed little sign of stopping. As I inspected the defensive positions, I noted that one M60 machinegun position was unoccupied. A young soldier, shivering from the freezing rain, stood idly by with his M60 at his side. Calling the platoon sergeant, who was also the acting platoon leader, to the vacant position, I asked why he had failed to place a team to cover the enemy's main avenue of approach into the company sector.

Responding that he was concerned about the welfare of the platoon and there was water in the bottom of the fighting position, he had decided not to occupy the position, but to "simulate" the crew-served weapon position. Further inquiry confirmed that neither the platoon sergeant nor the gunner had actually stood in the position. I jumped into the crew-served weapon position to determine the depth of the water and ascertain the fields of fire and discovered the water was only a few inches deep. Turning my attention to the machinegunner, I instructed him to put a sandbag in the hole so he could stay dry and then to check his assigned sector to ensure that he still covered the prescribed fields of fire.

Returning to the platoon sergeant, I reiterated my standards for defensive fighting positions and asked point blank if he was willing to meet those standards. When he responded, "No sir, not if your standards require me to put soldiers in fighting positions filled with water," I relieved him on the spot and assigned command of the platoon to the senior squad leader. I did not relieve the platoon sergeant for *failing* to meet the battalion standard, but for *refusing* to meet the standard, and his subsequent efficiency report reflected this distinction.

In my opinion, his action jeopardized not only the lives of his platoon but the company as well. Needless to say, my decision was not popular with the NCOs in the company. The unit first sergeant and the remorseful platoon sergeant later requested that I reconsider my decision. I realized that the platoon sergeant had been under a great deal of stress, but a vacated M60 position could have resulted in the death of the entire platoon, and no individual—officer or noncommissioned officer, regardless of his personal popularity—should be permitted to endanger the lives of our soldiers. Wars are not won on sentiment. The decision stood.

Be optimistic. Optimism breeds self-confidence. When conditions are difficult, the command is depressed, and everyone seems critical and pessimistic, you must be especially cheerful and optimistic. In writing his memoirs, Eisenhower remarked that optimism and pessimism are infectious and they spread more rapidly from the head downward than in any other direction. A commander's optimism has the most extraordinary effect upon all with whom he comes in contact. With that realization, Eisenhower firmly determined that his mannerisms and speech in public

Eisenhower firmly determined that his mannerisms and speech in public would always reflect the cheerful certainty of victory.

would always reflect the cheerful certainty of victory—that any pessimism and discouragement he might feel would be reserved for the privacy of his tent.

Military theorist J.F.C. Fuller and George S. Patton expressed similar sentiments. Fuller said a sense of humor was the lubricant of a good battalion. According to Patton, self-confidence was the twin brother of leadership. Look at the way the Third Army responded to him during the Normandy breakout and the Ardennes campaign. Patton exuded optimism and confidence and was thus able to inspire his men with confidence and earn their trust. Who else could have taken an army from a mid-winter drive, turned it 90 degrees to the north, and then vigorously counterattacked to relieve the embattled garrison at Bastogne? His soldiers went into battle knowing that they would be victorious so long as Patton was in command.

The same optimism is still necessary today. During a company exercise using MILES (multiple integrated laser engagement system), I once overheard a soldier tell a fellow platoon member that he was glad he was in first squad because his squad leader always placed first in every platoon competition. That soldier was confident that his unit would emerge victorious. And that squad leader had the same effect on his men that Patton and Eisenhower had on the armies in northwest Europe.

It is especially important to remain optimistic when you make mistakes personally. Every leader I have known has made his share of mistakes in the field (I have made more than my share), and you will do the same. Don't let it get you down. Learn from those mistakes and drive on.

Be selfless. Selflessness, rather than selfishness, is the fourth prerequisite for successful command. Marshall once noted that when evening comes and all are exhausted, hungry, and possibly dispirited—particularly in unfavorable weather at the end of a march or in battle—you must put aside any thought of personal fatigue and display marked energy in looking after the comfort of your organization, inspecting your lines, and preparing for tomorrow. Commanders are not supermen. They get just as tired, just as thirsty, and just as distraught as their soldiers. But a commander has an obligation to the men he leads to provide for their welfare and prepare them for combat.

On arriving at a new location, the commander must ensure that his men are prepared for the evening's battle. Once the fighting positions are ready and the company is on reduced alert, the commander must make the final inspection of the line, questioning machinegunners and individual riflemen on their sectors of fire. Have warning orders and fragmentary orders been issued for subsequent operations? Have you forgotten anything? A commander's work is truly never complete.

Following a particularly difficult 18-mile field march over some of the most treacherous terrain on Oahu, I once saw a first sergeant walk his entire company line, instructing squad leaders to inspect the soldiers' feet, forcing soldiers to consume water, and ordering platoon medics to check each and every soldier in the command. He then personally inspected each of his platoon sergeants. Only after he had supervised the accomplishment of these tasks did he take the boots off his own blistered feet and apply medication. That first sergeant was a soldiers' soldier.

Make a point of extreme loyalty, in thought and deed, to your senior leaders personally; and in your efforts to carry out their plans or policies, the less you approve, the more energy you must direct to the task.

Be loyal. All successful commanders possess the virtue of loyalty. Make a point of extreme loyalty, in thought and deed, to your senior leaders personally; and in your efforts to carry out their plans or policies, the less you approve, the more energy you must direct to the task. You frequently hear leaders complain about decisions of superior officers. Why is the captain making us go to the field on a weekend? Why does our first sergeant make us do more sit-ups than Bravo Company's first sergeant? Soldiers have a right to grumble; officers and noncommissioned officers do not.

Loyalty, however, is a two-way street. Loyalty is also important down the chain of command—to soldiers and junior leaders entrusted to your care. Far too frequently, general and flag officers are only too willing to share in a subordinate unit's achievement when the results make the senior organization look good, then immediately look for scapegoats when junior leaders make mistakes.

Instead of relieving subordinate leaders or penalizing them on an evaluation report, take the time to counsel them in a constructive manner. Allow junior leaders to grow. If the Army learned anything from the 1970s, it is that a "zero defects" force is detrimental to the morale and efficiency of the Army as a professional fighting force. If the offense occurs a second time, that is a different matter.

I generally found it beneficial to cite outstanding performances by soldiers and junior leaders in my dispatches to senior headquarters. When my battalion became the first in the 25th Infantry Division to reenlist 100 soldiers in six-month period, the people whose names went forward to the commanding general were not the battalion and company commanders but the company reenlistment NCOs. They did the work, not the officers. When the 100th first-termer signed his papers, I asked the division public affairs officer to do a story on him and his company. To the soldier's delight, his photograph appeared in the next edition of the division newspaper. We followed a similar practice when the battalion led the others three years in a row for the most Expert Field Medical Badge recipients. The names recognized in the newspaper were those of the physician's assistant and the medical platoon sergeant, as well as each recipient.

The most successful commanders are those who do not worry about who gets

the credit. Eisenhower put it best: "Humility must always be the portion of any man who receives acclaim earned by the blood of his followers and the sacrifices of his friends." Consequently, recognition of a soldier in front of his comrades should always be foremost in a commander's mind. Pin that Expert Infantryman Badge on a private's chest following the successful completion of a final road march. Orders and formal ceremonies can follow.

One final recommendation on the recognition of soldiers. Although many commanders will disagree, I suggest you be generous with letters of commendation and medals that you are empowered to bestow. A handwritten note by a commander on the occasion of a promotion or graduation from a school is a treasured memento for a young soldier. I noticed while conducting an unannounced inspection one morning that several soldiers had taped some of my notes inside their wall lockers.

With respect to medals, establish a policy and be consistent. An Army Achievement Medal is not the Medal of Honor. Be generous if a young infantryman meets your standard. And remember the junior noncommissioned officers and the commissioned officers too.

Remain calm. Battle by its nature is chaotic. Your responsibility as a commander is to keep this chaos from becoming worse than it already is. The more alarming the reports received or the conditions viewed in battle, the more determined must be your attitude. Granted, bad news never improves with time, but initial reports are generally far more disquieting than the reality. As a rule, if you look down the track and see ten troubles approaching you, nine of them will derail before they reach you, and you can generally handle the tenth with little effort.

I once received three reports during a 20-minute period of a field exercise in which my battalion served as the opposing force to five Army and Marine corps infantry battalions on the Hawaiian islands of Oahu and Molokai. Shortly after noon on D-Day, I received a tactical satellite message that one of my companies had been surrounded and compelled to surrender to a numerically superior force. Ten minutes later, the scout platoon reported that the air was filled with UH-60 aircraft and that at least three battalions were conducting a brigade size air assault not far from our forward positions. Within minutes, another commander called to inform me that enemy scouts were marking lanes for a subsequent amphibious landing. And, by the way, one of the soldiers had "misplaced" his protective mask. All this on the first day of the exercise.

The situation soon clarified. It was not my company that was surrounded but my company that had surrounded the enemy. True, the enemy had air assaulted north of our primary positions but on landing zones where we had concentrated planned artillery fires. My company commander on the beach reported later in the evening that the enemy scouts had determined that the beach defenses were too formidable and an enemy air assault was aborted due to defensive obstacles and superior firepower. And yes, under the direction of his squad leader, the soldier found his protective mask.

The list of characteristics could continue, but I remain convinced that the average commander who scrupulously follows this course of action is bound to succeed in battle. Marshall noted that few commanders he encountered during the Great War seemed equal to it, but he believed this was due to their failure to realize the importance of so governing their course.

As a commander in today's Army, your greatest challenge is to realize the importance of command and to be willing to make the necessary sacrifices. The Army's future is in your hands. Make the most of it.

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Mortar Support in the Korean Defile

LIEUTENANT BRIAN A. PEDERSEN

Providing mortar support for an armor task force on today's fast-paced battlefield is a very difficult mission, and this is particularly true in mountainous terrain like that in Bosnia or Korea. Fighting in the restrictive terrain of Korea requires a high degree of coordination and a flexible tactical approach to providing effective supporting fires.

Restrictive terrain is defined as terrain that hinders movement to some degree. *Severely* restrictive terrain is that which hinders or slows movement in combat formations unless some ef-

fort is made to improve mobility. This can mean either committing engineer assets to the task or deviating from doctrinal tactics, such as moving in columns instead of line formations or at slower speeds than might be preferred.

In Korea, the 2d Battalion, 72d Armor, 2d Infantry Division, used an assessment of METT-T (mission, enemy, terrain, troops, and time) to develop a method of effectively employing mortars in offensive operations in restrictive terrain:

Mission. The most important mission a tank-heavy task force can be expected to execute in a war in Korea is a counterattack against a hasty defense. A movement to contact, for example, requires the greatest flexibility in tactics and a METT-T assessment of the best way to apply doctrine to the situation at hand. In the 2d Battalion, this first offensive engagement is the attack from the march (Figure 1). The task force, marching in its column 7.5 kilometers long, makes contact with the enemy at the entrance of a defile, attacks to gain a foothold within the defile, then fights through to exit the defile and either establish a defense or continue the penetration.

Enemy. The North Korean threat that an armor task force could expect to see in the defile would consist of VTT-323 armored personnel carriers, T-55 tanks, T-62 tanks, light amphibious tanks, truck-mobile infantry units, dismounted rocket-propelled grenade and antitank weapons teams, artillery groups of various sizes, and special operations teams. An important fact to remember is that the North Koreans do not yet have thermal sight capabilities for their tank and antitank weapon systems.

Terrain. The restrictive terrain is what makes Korea such a difficult place in which to fight; in general, this is a larger factor in executing tactics than the disposition of either enemy or friendly troops. Mountainous terrain dominates the Korean peninsula, with fewer and fewer trafficable roads as you move north. Mobility corridors are often reduced to a single-lane road, and battlesight ranges drop to less than 400 meters for the M1A1 tank. Numerous rivers and streams, combined with sprawling urbanization and swamp-like rice paddies, make the terrain difficult or impassable during the rainy season and channels movement during most other times. The broken, mountainous topography helps the enemy find keyhole positions to counter superior U.S. technology. (A keyhole position is one in which the defender cannot be seen until after the enemy passes in front of him and presents his flank; this usually gives the defender only three to six seconds to fire.)

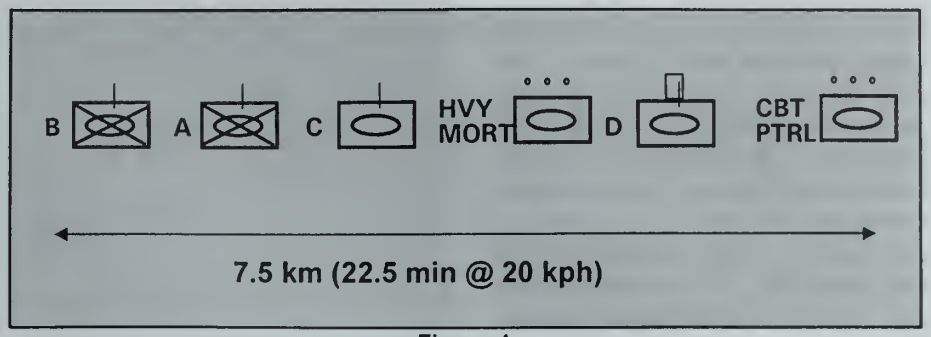

Figure 1

Troops. For friendly troops, the armor task force has six organic 120mm track-mounted heavy mortar systems. These mortars have a maximum effective range of 7,200 meters and are manned by approximately 35 soldiers (MOS 11C). The most important planning factors to consider in this area are survivability and the Class V (ammunition) required supply rate. (The carrier is in the M113 family of vehicles, lightly armored, and armed with a .50 caliber machinegun. The M1064A3 120mm mortar carrier carries only 69 rounds.)

"Never depend completely on the strength of the terrain and consequently never be enticed into passive defense by a strong terrain."
General Carl von Clausewitz

Time. Time is the most difficult planning factor to evaluate for warfare in Korea, and time is against an armored task force attacking into the defile. The faster it can muster its forces and mount an attack, the less time the defenders have to prepare to counter the technological advantages of the M1A1 tanks. But the longer the task force has to prepare for its attack, the more combined arms assets it can employ, and the better coordination it can make for conducting operations.

Using this METT-T assessment, the 2d Battalion formulated a way to make the most of its mortar platoon's indirect fire support. The method first takes into account the terrain and the movement constraints it places on the task force. With the task force in column on a single-lane road, the mortar platoon may never be in range to provide supporting fires if it is placed too far back in the order of march. The mortars must be far enough forward to range the enemy but far enough back to keep from leading the task force into an engagement area. Therefore, the mortars in the 2d Battalion move immediately behind the task force command group, which follows the lead company.

For survivability, the mortars can operate in split sections. Despite their separation, and because of the narrow defile, both sections can quickly mass, as a platoon, on targets along the length of the defile. To meet the ammunition requirements of an intense defile fight, a five-ton truck with a second load of Class V follows closely behind the trail section. Pre-positioned ammunition stores are used before the line of departure, if possible.

Next, taking into account the enemy's lack of a thermal sight capability, the mortars use an equal number of smoke and high-explosive (HE) rounds to blind and confuse him in the defile. To increase responsiveness, all poten-

tial keyhole positions are templated within the defile, and key enemy positions from the template are targeted. As the lead elements of the task force (scouts or combat patrol) move toward these keyhole positions, the commander determines whether to fire smoke or HE rounds or to allow the tanks to clear with direct fire. The standard procedure requires that the mortars suppress all likely keyhole positions in sequence in front of the lead tank. Bounding mortar sections can cover all priority targets throughout the defile.

At the point in the opening engagement where the scouts (or the combat patrol) find the enemy element they need to destroy to gain a foothold into the defile, they send a codeword call (TRP ZULU) over the task force net. This codeword gives the composition and location of the enemy force and becomes the task force's priority target. All mortar fires will then concentrate on this target, suppressing and smoking it until it can be engaged by direct fire. If bounding forward when this call for fire comes, a section will conduct a "hipshoot" and converge its fires onto the enemy location with those of the stationary section.

Throughout the defile fight, the mortars must maintain a clear picture of the priorities of fire and follow the flow of the fight; they may be required to provide support for the scouts, the combat patrol, the lead company or team of the task force, the breach company, the assault company, or the reserve company. Mortars should plan to suppress dismounts, disrupt lightly armored vehicle formations, smoke enemy tanks or antitank assets, or smoke suspected enemy observation points or keyhole positions.

Once the task force has its foothold in the defile, the lead team continues to move through the center. (The main battle begins with the scouts moving into the defile and reconnoitering the location of the enemy's obstacles and antitank ambush site. They call smoke missions that signal the beginning of the breach by the breach company.) The enemy antitank ambush will be the mortar platoon's primary targets. The

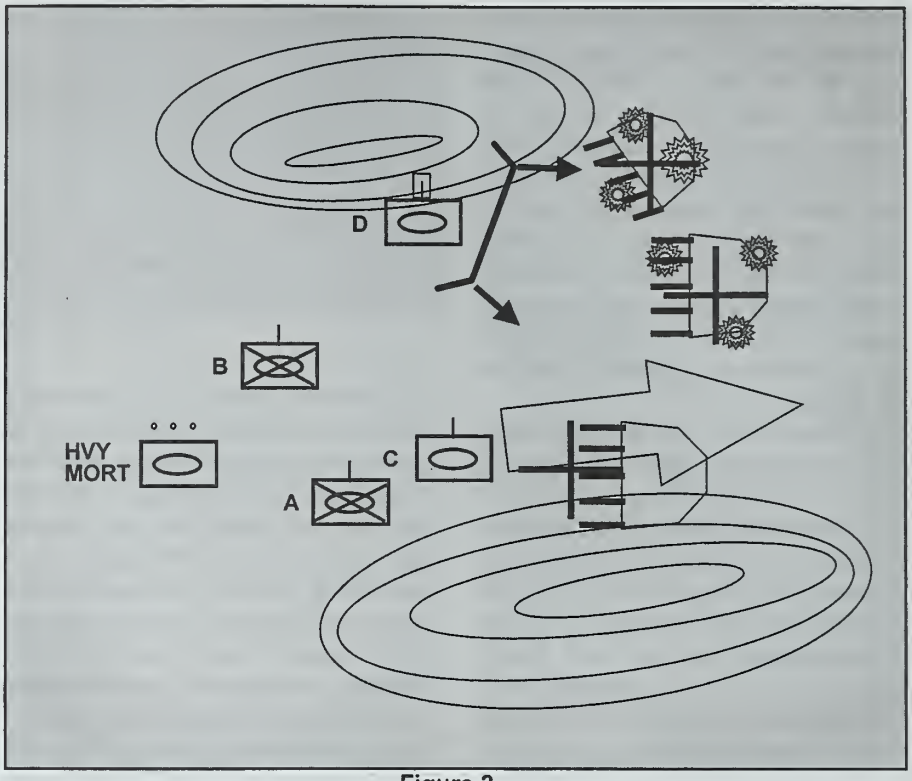

Figure 2

mortars will conduct the "hipshoot" and converge platoon fires onto observed enemy positions and observation points, attempting to blind, confuse, and destroy the enemy in place while the breach team does its job.

The final phase in the attack through the defile is the exit battle, which begins once the breach company has cleared the obstacle for the task force. Since the enemy is no longer in the defile, this is the point where the enemy defense will have both depth and width while the task force will have a minimum frontage.

This is the most critical point in the battle for the mortars. The lead element of the task force will once again choose the enemy element that it must destroy to penetrate the defense and exit the defile. The codeword call (TRP ZULU) again goes out on the task force net, and the mortars immediately concentrate fires with smoke and HE onto this enemy position (Figure 2). Once the direct-fire weapon systems have converged on the enemy, however, the mortars must shift with smoke and HE onto enemy elements in position to flank the task force's tanks emerging from the defile. Once the friendly forces have exited the defile and suppressed or destroyed the remaining opposition, the task force will either continue the attack or establish an L-shaped ambush in anticipation of a counterattack.

Mortars can make the difference between victory and defeat in restrictive terrain. The 120mm mortar platoon is the task force commander's "hip-pocket" artillery. Used to its full potential, it can be devastating in a limited battlespace. This scenario is just one of many ways to approach the unique problems of fighting in the Korean defile. It represents a methodology that can be taught rapidly, it uses commonly trained combat skills, and it embraces current doctrine while introducing innovative ideas for approaching combat situations in Korea.

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Space Support to the Infantry

LIEUTENANT COLONEL TIM MISHKOFSKI

Infantry operations today have global implications, and the U.S. Army Space Command (ARSPACE), the Army operational component of the U.S. Space Command, is influencing the future infantry battle now. Its soldiers, including quite a few Infantrymen, are deployed worldwide in support of operations 24 hours a day.

What this means for today's Infantryman is that numerous new systems are arriving on the battlefield to acquire, use, protect, deny, exploit, and manage weapon systems for information operations. The maneuver commander still sees the land battle in the context of the dimensions of available battlespace (in terms of mission, enemy, terrain, troops, and time). Our Army Warfighting Experiments (AWEs) have revealed a new battlefield on which we gather, process, and use information in new and different ways.

By way of a thorough intelligence preparation of the battlefield (IPB), the commander uses space systems to acquire information to use in influencing the enemy's actions, denying him information, and exploiting his weaknesses. Space systems then serve to protect the infantry commander's compressed decision cycle. Commanders still want to know the dynamics of their battlespace, and space systems provide the instant edge that enables them to move, shoot, and communicate in three dimensions.

The systems that make this leap possible are already here and in the hands of combat arms soldiers as part of the Army Space Exploitation Demonstration Program. The assigned mission of ARSPACE is to reduce delays that keep soldiers from the potential combat power of new space force enhancement weapons and to deliver those weapons to the field. In the past two years, ARSPACE has delivered systems to numerous major training exercises. In fact, an Army space support team was attached to the 10th Special Forces Group component of the Dismounted Battlespace Battle Laboratory's AWE *Warrior Focus*.

ARSPACE is developing a number of demonstration program systems for the immediate future. These systems were carefully developed to meet the operational capability requirements of U.S. Army Training and Doctrine Command (TRADOC) Pamphlet 525-66, *Future Operational Capability*. Those systems include the following:

Global Broadcast Service (GBS) Operational Demonstration. During XVIII Corps Exercise *Royal Dragon 96*, GBS provided rapid multiechelon space-based distribution of seamless, secure video, imagery, maps, data, E-mail, and voice in support of the operational scheme of maneuver. GBS provides an information superhighway of real-time video, imagery, maps, friendly and enemy locations, and other data from units at levels from corps to platoon. In the field, the signal can come from a laptop computer. The large amounts of data provided by GBS allow the commander to receive current map data worldwide.

Low Earth Orbit Mobile Data Communications (LEOCOMM) Operational Demonstration. This system relies on a new low-earth-orbit satellite constellation to provide two-way digital messages to the individual soldier. In application, this pager-based system frees the commander from the line-of-sight limitations imposed by cross-compartmentalized, mountainous, or jungle terrain, with direct-to-soldier space uplink and downlink.

One objective application of a LEOCOMM-type paging system is to warn soldiers of incoming ordnance, so that they can avoid the casualty radius of impacting rounds. If a SCUD-type weapon is coming in on a soldier's location, the beeper can tell him, in effect, "The SCUD will hit in two minutes; if you move 500 meters due east immediately, you can reduce unit casualties by 95 percent."

GPS Attitude Determination Device (ADD) Operational Demonstration. This device has already been used at the National Training Center and in Korea. For an artillery unit, ADD gives the commander "HE Quick" immediate fire capability to suppress or neutralize and destroy targets of opportunity, disrupt enemy counterattack, and support J-SEAD (joint suppression of enemy air defenses) and JAAT (joint air attack teams). The system is useful for the internal defense type missions of Special Operations forces engaged in training indigenous units to acquire and

suppress indirect fire targets. It also may be used for navigation by maneuver units, such as a brigade task force at the National Training Center, with its ability to compute avenue of approach in real-time to an accuracy within one mil.

Blue Force Tracking (BFT) Operational Demonstration. BFT provides one of the most significant space force enhancements. It was used successfully in the Mounted Battlespace Battle Lab's Exercise *Focused Dispatch* to bridge the 100-mile distance between the Western Kentucky Training Area and Fort Knox for real time and virtual integration from geosynchronous orbit. BFT uses available space systems to display "blue force" location, identification, and movement on conventional maneuver control systems. It provides near real time situational awareness and fratricide avoidance.

BFT equipment mounted on a Bradley fighting vehicle reduces the "fog of war" by sending an electronic situation report from the battle scene, and updates data by injecting digitized moving map icons into the commander's computer screen every few seconds. During the exercise—for example—the brigade fire support team can click on the blue icon projected from space and see the track commander's name, vehicle bumper number, and a short sentence, such as "I'm broken down and going to the UMCP; please do not shoot me."

Meteorological Automated Sensor and Transceiver (MAST) Operational Demonstration. MAST enables the brigade task force commander to see over the next hill. It prepares the unit for reaction to changed weather, not unlike the situation in which VII Corps found itself before the battles of Norfolk and 73 Easting during Operation *Desert Storm*.

The MAST system can provide for NBC dispersion or chemical attack predictions, with constant real-time forecasts that can be updated. The generated information provides G-2 or S-2 forward area weather sensors to gather meteorological information in data-denied areas—and areas for which we have sparse data on wind, pressure, humidity, visibility, soil moisture, and the like—and automatically relays that data by satellite to division and corps weather teams.

Blue Force Tracking Demo mounted on M2A2 during AWE focused dispatch.

Small Terrain Visualization Device Operational Demonstration. This device enables commanders at battalion level and below to choose a route, and build by satellite, a three-dimensional "movie" (drive-through) of the route using a laptop personal computer. It is an electronic terrain table at the commander's fingertips. It reduces the time required to prepare for the next operation, when staffs and troops are tired and stressed, day or night, and in chemical or directed energy warfare environments.

Military Tracking and Guidance Electronics Technology Demonstration. When the Aegis Cruiser Vincennes mistakenly shot down a commercial Iranian A300 Airbus in the Arabian Gulf, one of the factors cited was the information overload that individual systems impose on a commander. This tracking and guidance technology cuts that overload by letting through only the information that is critical to support fire and maneuver. The commander tailors information requirements to the operational plan, the level of risk, and the subordinate commander's experience.

This space-based demonstration is a compact, radiation-hardened processor to pre-filter massive data downlinks—reducing soldier and system processing time in critical situations to direct fires, react to enemy movement, and conduct operations across the forward line of troops.

Hyperspectral Sensor Concept Technology Demonstration. The next war we fight may be on a battlefield polluted by chemical, biological, radiological, and directed-energy weapons. This system uses space-based hyperspectral imagery for remote detection and identification of battlefield and terrorist induced chemical agents, as well as camouflaged man-made targets. It provides a sensor for 8 to 11 micrometers in the infrared waveband with a resolution of 47 nanometers—a leap ahead in detail from current multispectral sensors.

For information on ARSPACE space force enhancement, contact SSDC Public Affairs, (719) 554-8899, or e-mail: whitee@spacecmd-emh2.Army.mil.

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Let's Reorganize
Our BFV Companies

MAJOR STEVE E. LANDIS

It is not news to anyone connected with the mechanized infantry force that the dismounted elements seldom influence the battles at the Army's combat training centers. This poor performance is not universal, and it is not caused by any lack of motivation or discipline on the part of our infantrymen. But it is real, continuing, and far too widespread.

The problems that affect the force are caused by factors that fall into four general categories:

Employment. Leaders at battalion and company level seldom develop detailed plans for employing dismounted infantry. Company commanders and platoon leaders—although generally eager to get their dismounted infantrymen into the fight—do not recognize when and why to dismount them. All too often, dismounted infantrymen find themselves "dying" in the back of a Bradley fighting vehicle (BFV). Dismounted actions, when they do occur, are often hasty and are not coordinated with the supporting vehicles.

Training. The training of the dismounted element generally does not approach that of the mounted element—in either quantity or quality. Dismounted soldiers provide support for gunnery, mounted training, and numerous smaller tasks. When units do conduct training, they often do not integrate the mounted and dismounted elements.

Leadership. Units often assign their most senior and experienced noncommissioned officers as Bradley commanders, leaving less experienced or capable leaders for the dismounted element. The pressure to obtain good BFV gunnery results seems to contribute to this outcome. And the eventual fielding of a precision gunnery system for the Bradley, while improving effectiveness, is likely to place an even greater premium on mounted crews. As a result, the young dismounts do not get the training, experience, or tools they need for success. All of this, further evidenced by problems with training and manning, creates the perception of the dismounted infantrymen as second-class citizens.

Manning. Mechanized infantry units routinely deploy to the training centers with their dismounted squads at 50 percent strength or less. While personnel turbulence is part of this problem, the continuing practice of using infantrymen to fill positions at division, brigade, and battalion levels also contributes to it.

The problems listed above paint a bleak but fair picture of the state of our dismounted infantry force. There are exceptions, of course, that generally result from exceptional focus and commitment on the part of some battalion and company commanders. These commanders believe that dismounted infantry brings to the battlefield a significant capability and that mechanized infantry units are neither desirable nor effective when used as "light tank" forces. Even exceptional leaders struggle with at least some of the same problems.

The infantry community must address solutions to the systemic shortcomings that afflict the dismounted force, beginning with organizational change.

Organization

The current organization of the mechanized platoon resulted from a 1989 white paper that addressed doctrine, force design, leader development, and training strategies for BFV-equipped mechanized infantry units. *(See "Bradley Platoon Organization," by Major General Michael F. Spigelmire, INFANTRY, January-February 1990, pages 1-2.)* The existing organization at the time was a holdover from M113 days, with each squad having a three-man mounted crew and a six-man dismount element. The paper concluded that this organization was ineffective and recommended the consolidation of the dismount element into two nine-man squads, with the BFV crew organized into a separate mounted section. General Spigelmire, the Chief of Infantry at that time, described some of the merits of the new organization:

Thus, the new organization provides a standard platoon structure that focuses leadership for dismounted and mounted operations and for training. This focus of leadership, with Bradley commanders in the turret and squad leaders in the dismount positions, eliminates the switching of leadership responsibilities from the back of the vehicle to the turret when the squads must execute dismounted infantry missions. This standard platoon structure also aligns the Bradley-equipped mech-

anized infantry with the rest of the infantry force.

For the same reasons that led to the 1989 white paper, it is now time to go one step farther. The organization of our mechanized infantry units should be tailored to promote their effective training and employment on the battlefield. This article will propose a reorganization of the BFV infantry company into a configuration of two mounted and two dismounted platoons (2x2). This reorganization would address the first three of the four problem areas. With very few additional resources, it would promote a more effective employment of dismounted infantry, improve the quality and amount of training, and put more experienced leaders on the ground.

A 2x2 BFV-equipped mechanized infantry company would consist of four platoons—two mounted and two dismounted, plus a headquarters section. Each mounted platoon would consist of six BFVs and 18 men. Each dismounted platoon would consist of three nine-man squads and a headquarters section—a platoon leader, a platoon sergeant, and two radiotelephone operators (RTOs)—totaling 31 men. Reorganizing in this fashion would require the addition of three men to the company's authorization: one platoon leader (a second or first lieutenant), one platoon sergeant (sergeant first class), and one RTO (the present company organization has three).

The Army's present austere manning would undoubtedly make the addition of another officer and senior NCO exceedingly difficult. But if the additional slots could not be found in other areas, these positions could be authorized but not filled for the time being, leaving one of the company's platoons with an NCO platoon leader. Although this is not desirable, it is fairly common in the force as currently configured and should not be permitted to prevent the reorganization.

The 2x2 organization would help solve the problems in the four general categories discussed earlier:

Employment. Because battalion commanders plan two levels down, dismounted infantry platoons, as separate and distinct entities, would be an explicit part of the planning process. Furthermore, since a dismounted platoon's strength and capabilities would be similar to those of light infantry platoons, appropriate missions and tasks for them could be standardized across the force. (Under the current organization, when a commander orders a dismounted platoon to conduct a mission, all he gets is a reinforced squad in many cases.)

A BFV platoon would be habitually associated with a dismounted infantry platoon and would always provide it with transportation .

The company commander would be required to develop a task and purpose for his dismounted platoons, something often neglected under the current organization. In addition, the commander would have dismounted platoon leaders to help develop detailed plans for their employment. Ideally, because of the challenges associated with leading a 31-man organization on the battlefield, the dismounted platoon leaders would be the most senior and most experienced lieutenants in the company.

The 2x2 organization would still offer considerable flexibility for cross-attachment with an armor company, but simply swapping platoons would no longer be the preferred solution. Commanders could truly allocate infantry platoons to tank companies on the basis of anticipated mission requirements. A tank company attacking to seize an objective against a prepared defense might get an entire dismounted platoon and the associated BFV platoon as well. On the other hand, a tank company with few or no anticipated infantry tasks might get an infantry squad and a section of two Bradleys for transportation.

Tactics, techniques, and procedures for the employment of a six-vehicle BFV platoon already exist in Field Manual (FM) 17-98-1, *Scout Leader's Handbook*. Although there are significant differences between the missions of cavalry platoons and those of mechanized infantry platoons, this manual could serve as an interim reference until FM 7-7J, *Mechanized Infantry Platoon and Squad (Bradley)*, could be rewritten to conform to the new organization.

Within the company, a BFV platoon

BRADLEY INFANTRY PLATOON ORGANIZATION

SECTION A:	**1st SQUAD:**	
BFV 1:	**TEAM A:**	
BFV DVR (SPEC)	GNR (SPEC)	GRN (PFC)
SR GNR (SGT)	TM LDR (SGT)	AA SPEC (PFC)
PLT LDR (2LT) (BC)	AR SPEC	FO
BFV 2:	**TEAM B:**	
BFV DVR (SPEC)	SQD LDR (SSG)	AR SPEC
BFV GNR (SPEC)	TM LDR (SGT)	AA SPEC (PFC)
MST/GNR (BC) (SSG)	AR SPEC	PLT RTO (PFC)
SECTION B:	**2d SQUAD:**	
BFV 3:	**TEAM B:**	
BFV DVR (SPEC)	SQD LDR (SSG)	AR SPEC
BFV GNR (SPEC)	TM LDR (SGT)	AA SPEC (PFC)
SSG (BC)	AR SPEC	
BFV 4:	**TEAM A:**	
BFV DVR (SPEC)	TM LDR (SGT)	AA SPEC (PFC)
SR GNR (SGT)	AR SPEC	AIDMAN
PSG (BC) (SFC)	GRN (PFC)	FO RTO

BRADLEY 2x2 ORGANIZATION

MOUNTED PLATOON	DISMOUNTED PLATOON	
SECTION A:	**1st SQUAD:**	
BFV 1:	TEAM A:	
BFV DVR (SPEC)	AA (SPEC)(PFC)	GRN (PFC)
SR GNR (SGT)	TM LDR (SGT)	PSG (SFC)
PLT LDR (2LT) (BC)	AR SPEC	PLT RTO (PFC)
BFV 2:	TEAM B:	
BFV DVR (SPEC)	SQD LDR (SSG)	AR SPEC
BFV GNR (SPEC)	TM LDR (SGT)	AA SPEC (PFC)
SSG (BC)	AR (SPEC)	AIDMAN
SECTION B:	**2d SQUAD:**	
BFV 3:	TEAM A:	
BFV DVR (SPEC)	TM LDR (SGT)	AA SPEC (PFC)
SR GNR (SGT)	AR SPEC	PLTL LDR (2LT)
PSG (BC) (SFC)	GRN (PFC)	PLT RTO (PFC)
BFV 4:	TEAM B:	
BFV DVR (SPEC)	SQD LDR (SSG)	AR SPEC
BFV GNR (SPEC)	TM LDR (SGT)	AA SPEC (PFC)
SSG (BC)	AR SPEC	
SECTION C:	**3d SQUAD:**	
BFV 5:	TEAM A:	
BFV DVR (SPEC)	SQD LDR (SSG)	AR SPEC
BFV GNR (SPEC)	TM LDR (SGT)	AA SPEC (PFC)
MST/GNR (SSG) (BC)	AR SPEC	
BFV 6:	TEAM B:	
BFV DVR (SPEC)	TM LDR (SGT)	AA SPEC (PFC)
BFV GNR (SPEC)	AR SPEC	FO
SSG (BC)	GRN (PFC)	FO RTO

would be habitually associated with a dismounted infantry platoon and would always provide it with transportation. The BFV platoon would be organized into three sections of two BFVs each, with each section transporting a dismounted squad. As a rule, one dismounted fire team would ride on each of the six BFVs, with the platoon leader, platoon sergeant, and each squad leader in a different vehicle.

The reorganized BFV platoon would focus on only two things: transporting its associated dismounted platoon safely to the point where the dismounted infantry could get into the fight, and providing direct fire support to the dismount element once it was on the ground. This would not prevent the BFV platoon from performing other tasks, but the guiding rule would have to be that, against an enemy with antiarmor capability, the BFV platoon would avoid mounted combat while infantrymen were riding in the back. The BFV was created to be more than a battlefield taxi, but infantry and armor leaders must stop thinking of it as a light tank and trying to maneuver it accordingly.

The BFV platoon leader would no longer face the decision of whether to dismount or remain with his vehicles. While the rule of thumb has always been that the platoon leader dismounts with his infantry, this often leads to a lapse in command and control. The platoon leader loses valuable time getting "dressed," organized, and up on the net. With the 2x2 organization, he would always be ready to dismount immediately. If a dismounted platoon received an independent mission—such as an air assault, an infiltration, or a stealth breach—neither the mounted nor the dismounted platoons would lose key leaders.

Finally, the fielding of Force XXI technology would be optimized in a 2x2 company. This technology would improve the mounted platoon leader's ability to control his six-vehicle platoon. Likewise, the fielding of a Land Warrior system would fully integrate the dismounted platoon into the heavy combined arms team.

Training. Today, a BFV infantry platoon leader faces a daunting task. He is responsible for training a mounted section that must master as many skills as a tank platoon, and for training a dismounted section in most of the skills of a light infantry platoon. Admittedly, the platoon leader gets help from the company and the battalion, but the performance of many of our mechanized infantry platoons at the training centers confirms the difficulty of this task.

One of the specified reasons for switching to our current organization of two nine-man squads per platoon was to improve the training focus for the dismounted element. Under the original BFV infantry organization, the dual-hatted squad leaders were asked to shoulder too heavy a load. Now the platoon leader faces the same problem, with the result that most of his time and effort is devoted to the mounted element. While some battalions and companies are able to establish effective dismounted training programs, many are not.

The consolidation of the dismounted squads into two platoons with dedicated platoon leaders and sergeants would improve both the quality and the quantity of training. These lieutenants and senior NCOs would not need to divide their time among the motor pool, the conduct-of-fire trainer, BFV crew training, and dismounted training. Furthermore, because of their seniority, these leaders would have much more influence than our current squad leaders in developing, resourcing, and advancing training plans.

Clearly, this training challenge would not go away with the adoption of a 2x2 organization, but the creation of dismounted platoons would give these critical units greater visibility at battalion level and above. Although this

would be no guarantee of effective training for the dismounted platoons, it would keep them from becoming absorbed in supporting mounted training.

Leadership. The 2x2 structure would enhance the leader development of infantry lieutenants, so long as these officers were given an opportunity to move from leading mounted platoons to leading dismounted platoons. Many of our current crop of mechanized infantry platoon leaders never get a good opportunity to lead infantrymen on the ground, simply because their platoons do not have any dismounted infantry. These lieutenants would be far better trained by serving one tour of duty in a 2x2 company.

Manning. The 2x2 organization would not resolve the issue of adequate manning for dismounted squads and platoons. This issue requires the constant attention of commanders at all levels and of personnel managers as well. First, we must assign soldiers to units in the field; then we assign them to fill infantry positions instead of having them serve in the headquarters, drive trucks, or work in personnel centers. Although all of these functions are important and may seem essential during garrison operations, these diversions come at a price, particularly if mechanized infantry units are called to battle on short notice.

Readiness reporting could be a tool for tracking our real dismounted strength if we modified the report to track infantry squads in greater detail. For example, the report could specifically track the number of nine-man infantry squads, eight-man squads, seven-man squads, and so on, in the battalion. The questionable practice of "battle rostering" soldiers in dismounted squads when they actually work somewhere else must be stopped in all units. If a soldier is not available to train with his squad routinely, he should not be counted as part of that unit.

There would still be a great temptation to take the best soldiers from the dismounted platoons to fill vacancies in the mounted platoons. If not controlled, this tendency would wreak havoc upon the dismounted platoons, just as it now does on our BFV platoons. The best solution would be a smoothly functioning personnel system and 100-percent fill of all units with soldiers holding the correct military occupational specialties. Unfortunately, that standard has seldom been achieved in the recent past and is unlikely to be achieved in the near future.

The next best solution would be to place dismounted platoons at least on an equal footing with the mounted force; that is, we should not place higher value on filling a BFV crew position than on filling a dismounted squad position. Such a commitment might require us to accept two-man BFV crews in some cases. Of course, the trade-offs would have to be calculated. Companies would have to man enough BFVs to transport the dismounted force, and a three-man crew would increase the BFVs direct fire capabilities. Nonetheless, the most important contribution of mechanized infantry to the combined arms team is the ability to put infantrymen on the ground at critical times and places. Our mechanized infantry must avoid becoming, by default, little more than a light tank force.

Why Not Dismounted Companies?

A logical argument could be made for taking this proposal a step further by creating dismounted *companies* within the battalion. (In fact, some leaders have argued for the authority to try this organization, only to be overruled within their divisions.) Dividing the mechanized infantry battalion into mounted and dismounted companies would be preferable to the current situation, but the 2x2 organization would be a better option for two reasons:

First, it would be easier to develop a habitual association between mounted and dismounted platoons under this organization. Soldiers' loyalties are strongest at the lowest levels—squad, platoon, and company—and decrease a bit at each higher level. Soldiers usually know all or most of the other soldiers in their company but may not know many outside the company.

Second, organizing into mounted and dismounted elements at battalion level would require a great deal of formal coordination at higher levels for task organization and the linkup of mounted and dismounted forces. Within a 2x2 company, most of this organization could be done quickly and informally in company or team assembly areas without involving the staff or higher commanders.

No organizational change can remedy all of the shortcomings of our dismounted mechanized infantry force. But the changes proposed here would substantially improve the battlefield employment, training, and leadership of this critical element. There is no lack of motivation or discipline among the soldiers who now serve in our dismounted squads, but they are usually "the bill payers" for every other need within their units. This can be corrected only by putting our emphasis back where it belongs—on the *Infantry* instead of on the *mechanized.*

The 2x2 organization would create recognizable dismounted infantry platoons—led by more senior and experienced leaders—that are visible on the "radar screens" of battalion, brigade, and division commanders. We could institutionalize a higher standard of dismounted infantry performance without requiring our battalion and company commanders to expend an inordinate amount of effort in building, sustaining, and training a creditable dismounted force. Employed at the right place, at the right time, with the right training and equipment, dismounted infantry will be the decisive force on the battlefield. Let's give our infantrymen a chance to get into the fight!

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CONTINGENCY TRAINING
FOR STABILITY AND SUPPORT OPERATIONS

CAPTAIN JAMES B. DANIELS

Since the end of the Cold War, debate has raged about whether the tasks of operations other than war should be part of the mission essential task lists (METLs) for U.S. Army units. While this article will not attempt to address that larger question, it will discuss the way one infantry battalion performed the mission of moving more than 3,000 Cubans from the Republic of Panama to the U.S. Naval Base at Guantanamo, Cuba, and raise points for consideration in the METL debate. This 1995 mission is still a valuable source of lessons on ways a combat unit can perform a noncombat mission in a high-visibility, politically sensitive environment.

The chain of events that led to the mission began with the exodus of Cuban migrants in 1994. The U.S. Government

decided to regard these Cubans as economic migrants instead of political refugees. Those picked up by the U.S. Navy and Coast Guard were sent to holding camps in the Republic of Panama, where U.S. officials began processing their applications for entry to the United States. This solution was effective but relatively short-lived. The Panamanians soon tired of the situation and demanded that the Cubans be relocated. Washington then decided to move them to Guantanamo.

In December 1994, frustration and boredom in the camps themselves had led to large-scale riots in which approximately 200 U.S. soldiers were injured by thrown rocks and other missiles. These riots and the videotaped actions of the Cuban migrants were to have profound effects on the training and the attitudes of the force sent to move them.

When the call came, the 2d Brigade, 101st Airborne Division, was on what the division terms Black (alert) cycle. Only two battalions were needed for the mission, and the two at the highest alert levels were the 1st and 3d Battalions of the 502d Infantry. This article will focus on the actions of the 1st Battalion.

When the unit was alerted, the company commanders were called to the battalion headquarters, where they received briefings on the situation in Panama and watched a video of the 1994 riots. The deployment date was set for two and one-half weeks after notification. This gave the battalion time to train its soldiers for a mission not included in its METL.

In-country training also included lessons taught to the entire task force on important cultural differences between the United States. and Cuba.

The battalion put the time to good use. The training its soldiers underwent at Fort Campbell consisted of three basic components: human rights and rules of engagement, riot control training, and individual control holds and techniques.

Because the soldiers of the battalion would be dealing with large numbers of civilians in a politically charged, high-visibility environment, they received detailed classes on the rules of engagement. These rules clearly defined situations in which the use of force was and was not permitted, along with basic human rights training in regard to maintaining the dignity of the Cubans. All members of the battalion had to take a test on this instruction; those who did not pass it were retrained and retested.

For the second part of the pre-deployment training, the battalion was issued face shields and riot batons and shields. Using Field Manual (FM) 19-15, *Civil Disturbances*, as a guide, the battalion S-3 developed a training plan for dealing with large-scale riots. The soldiers practiced baton techniques and riot control formations.

This training culminated in an exercise in which more than 100 soldiers of the division's air defense artillery battalion played the role of rioters inside an enclosure. Each company, wearing riot gear, first had to prevent the rioters from forcing their way through the front gate. Then they had to enter the compound in formation to perform a variety of tasks such as removing wounded detainees, seizing riot instigators, and breaking up fights. The attitude of the role-players inside the enclosure ranged from passive to violently resistant. Some of the soldiers acting as detainees carried red marking pens to simulate knives and other homemade weapons. The marks these left served as graphic evidence of the effectiveness of the riot control training and unit teamwork in a riot situation.

In the most violent of these scenarios, the detainees attempted to separate individual soldiers from the formation and "kill" them with the red markers. In these confrontations, the role players had a slight advantage that they would not have in a real situation: They could try to snatch soldiers from the formation without fear that the others in the formation would actually injure them with riot batons. Despite this departure from reality, or even because of it, the soldiers involved learned several important lessons.

One of these lessons was the importance of maintaining physical contact between adjacent members in a formation. This is key to maintaining the integrity of the formation when surrounded by a violent mob. Soldiers often fixate on the situation to their immediate front and fail to realize that the formation has started to move. This momentary inattention can cause a gap when one section begins moving while one or more soldiers remain stationary. This is extremely important because of the difficulty of passing verbal commands amid the noise of a riot. Physical contact, or at least close proximity between soldiers, reduced the chance of a break in contact between the soldiers on the line.

In the more violent scenarios, the soldiers also learned that the only way to prevent the mob from dragging individual soldiers away from the formation was to respond immediately and aggressively to any attempts to lay hands on them. Once a unit has been surrounded by a mob intent on causing injury or death, there must be no hesitancy about the use of the baton against the rioters. Any reluctance to vigorously defend the formation and its members may result in tragedy. Once a soldier has been pulled from the formation, his chances of safe return are minimal; the crowd will always be able to drag him away from the formation faster than the formation can move toward the crowd and still maintain its cohesion.

One of the scenarios in this training required the company to enter a compound of rioters and try to seize the leaders. Three-man "snatch teams" moved about inside the formation. Whenever a mob leader was spotted near the formation, the team members would move to the side closest to their target. On the word from the team leader, the snatch team would rush outside the formation, take hold of their target, and drag him back inside the formation where he could be subdued and flex-cuffed.

This proved much more difficult in practice than in theory. The leaders who realized they were targets would always keep a row or two of people between them and the formation. Besides, they could always move away from the formation more quickly than the formation could pursue them. Any snatch team members who left the safety of the

formation also risked being captured by the mob.

Initially, the members of the task force removed their load carrying vests (LCVs) before entering the enclosure to prevent the rioters from grabbing them. The soldiers of the battalion soon learned, however, that there was little danger of being grabbed by their vests from the front, protected as they were by riot shields and batons. But when the rioters did manage to seize a soldier, the absence of an LCV left the other members of the formation with little to grab in pulling him back. By wearing their LCVs into the compound, therefore, the battalion's soldiers did not appreciably increase their chances of being pulled out of the formation by the rioters, but did give the others in the formation something to hold onto in pulling them back to safety.

These training scenarios also demonstrated the importance of having a simple but well-thought-out plan that had been briefed down to the lowest levels in the company and rehearsed beforehand as much as time allowed. Although the manual contains a detailed set of commands for riot control, verbal orders quickly become useless in the midst of a howling mob. One method the battalion used in an attempt to overcome this problem was a small bullhorn, but this was only a little better than the unaided voice; in the crowded center of the formation it just got in the way. This attempt also demonstrated that *hearing* the command was only half of the problem; the other half was being able to muster the necessary concentration to isolate the commander's orders from the crowd noises. This difficulty in communication also lends importance to maintaining the cohesion of the formation, since the loss of a soldier to the mob naturally necessitates a change in movement and action that must be ordered verbally.

This training provided valuable experience for the soldiers, but it also showed some weaknesses in the doctrine for riot control as laid out in FM 19-15. An outnumbered unit facing a hostile mob required more than just shields and riot batons to accomplish many of the missions assigned to them. The officers and men of the task force spent much time before and during the deployment discussing tactics and techniques for dealing with these situations. These questions led to the development of additional methods for riot control after arriving in Panama.

Further training and instruction came from the military police at Fort Campbell. Instructors from the division's MPs taught various types of control holds to subdue violent or resisting migrants. They also taught methods of physically transporting persons against their will. All of this training emphasized dealing with those who violently resisted, demonstrating the effect the video tape of the December riots had on the thinking of the task force's leaders.

All of this training was documented down to individual level. Each company maintained a checklist for each soldier, squad, and platoon, verifying that these soldiers had demonstrated proficiency in riot control techniques, formations, and human rights training. At first glance, this may appear to be merely an attempt to protect the command in the event of an ugly incident, but it went far beyond that. The battalion's leaders realized the potential for a public relations disaster for the task force, the Army, and the U.S. Government. In the event of a violent incident, the training would help soldiers deal humanely and effectively with the problem, while this documentation would serve as proof of the training and the care taken in preparing the battalion's soldiers for their mission.

After two and one-half weeks of training, the battalion deployed to the Republic of Panama. The advance party, which had deployed three days earlier, consisted of the battalion and company executive officers, the battalion S-4, and other support personnel. This advance party began setting up the area that would be home for the task force—a large open field on Howard Air Force Base.

On the high ground above the area, which was soon filled with large tents, was a small cinder-block latrine and shower house. Below the tent ground were two mess tents and eating areas. (The troops were to receive a hot breakfast and dinner and MREs—meals, ready to eat— for lunch.)

The first order of business upon arriving in Panama was acclimatization. Making the transition from the January cold of Fort Campbell to the tropical heat of Panama took some time. Leaders at all levels took special care to see that the troops did not overexert themselves during physical training or mission training until they had had several days to adjust to the heat and humidity. All soldiers of the task force were required to carry their filled two-quart canteens with them at all times, and hydration was enforced for the first few weeks of the mission.

After about two days for acclimatization, the riot control training began again in earnest. By this time, the task force had developed a plan for moving the Cubans, and the companies were able to develop a more mission-specific training plan:

Company B had the mission of moving the migrants from the camp onto the buses, and of preparing for possible riots and escape attempts at the camp.

Company A was assigned to escort the Cubans on the buses between the camps where they were being held and the airport. The company's training focused on disturbances on the buses en route.

Company C would move the migrants from the buses and put them on the planes that would take them to Guantanamo. The company's training focused on removing uncooperative or resistant migrants from the buses and putting them on the planes and on preventing the escape of migrants from the plane. For all of this training, soldiers from the battalion's headquarters company played the role of Cuban migrants. They took this duty seriously, and their willingness to endure the less-than-gentle treatment from their fellow soldiers contributed to the eventual success of the mission.

The knowledge that the international press and various human rights organizations would be observing this operation affected all facets of the training. Everyone realized that no matter how well the operation went it would be meaningless if any U.S. soldier was seen mistreating a migrant or using unnecessary force. For this reason, the training of all companies emphasized taking control of a situation and ending it quickly with a minimum of visible force. This

meant that more force used less visibly was preferable to a situation in which an attempt to minimize the use of force could result in a long drawn-out struggle or confrontation.

To this end, the task force soldiers made extensive use of the control holds, joint-locks, and other techniques learned from the MPs at Fort Campbell. For example, in the event of a migrant who resisted being transferred, it was considered better to move him quickly using a choke hold than to have a long battle trying to carry him while he struggled to resist. To develop these skills and build confidence, at least one company held wrestling matches and conducted aggressiveness training with the riot gear so the migrants would not intimidate the soldiers, especially the younger ones. This training consisted of something resembling football blocking drills: Soldiers would slam up against riot shields and strike them with batons so that other soldiers holding them would learn to be confident in the protection of their equipment; this would give them the reassurance they needed to put an end to any resistance or violence on the part of the Cubans.

Experience in this mission training also led to changes in the equipment used by the bus teams from Company A. When the riot batons with which the battalion had been practicing proved to be too long to wield effectively in the confines of the buses, the company cut several of them down to about half their original length, producing short truncheons. These, along with the shotguns carried on the buses, were not openly displayed until needed.

In addition to the mission essential tasks, the companies also continued practicing riot control training just in case conflict in the camps flared up again. Besides the formations and tactics practiced at home station, the companies invented new methods based on what they had seen in the videotaped riots. In the videos it was clear that the rioters had not tried to stand against any serious attempt to move toward them by troops equipped with riot gear. They preferred to retreat when challenged; and, unlike the opposing force at Fort Campbell, they stayed some distance from the riot control troops. The rioters were always able to move back from the riot control units more quickly than the riot control forces could use the "stomp and drag" technique described in FM 19-15. The injuries they inflicted in the December riots were mostly from stones they threw.

To combat this tactic, one technique was to bring the company on line, begin advancing at a walk, and then give the order to charge. At the order, the line would move forward at a dead sprint. Any rioter caught by the advancing line would be grabbed and forced to the ground as the line swept over him. A squad of soldiers running behind the main line would seize and flex-cuff those who had been caught by the main line.

In-country training also included lessons taught to the entire task force on important cultural differences between U.S. and Cuba. The soldiers learned, for example, about the Cubans extreme sensitivity to what they considered matters of personal honor and dignity, including the treatment of their families and wives or friends. Legal and human rights training given in Panama covered much of the same ground as that at Fort Campbell, but it was more detailed and provided a specific set of steps to be followed, time and situation permitting, for the escalation of force.

The basic plan was simple. Each day five convoys of five buses each would transport the migrants from the camps on the Empire Range complex down to Howard AFB, where they would be loaded onto the airplanes that would lift them back to Cuba. Company B would see to it that the migrants boarded the buses at the camps, forming two lines from the gate to the bus, between which the Cubans would pass. Company B also had the contingency mission of providing a platoon size quick-reaction force to air assault anywhere along the route in the event of an incident or escape.

Company A, with the battalion scout and mortar sections attached, served as escorts on the buses. (The bus drivers were soldiers from the task force.) Behind each convoy was a HMMWV (high-mobility multipurpose wheeled vehicle) carrying a squad fully equipped with riot gear to serve as an immediate reaction force.

At Howard AFB, Company C moved the migrants to the planes; one platoon formed two lines from the door of the bus to the rear ramp of the airplane. A second platoon was dispersed behind them to stop or chase any migrant who might break through the first line. Out of sight were several stretchers that could be used to transport any migrant who resisted passively, refusing to move.

In-country training also included lessons taught to the entire task force on important cultural differences between the U.S. and Cuba.

Positioned near the rear ramp of the plane, a soldier with a video camera recorded the movement of each migrant from the bus to the plane. In the event of violence, the battalion would have its own footage to show that U.S. soldiers had acted properly.

At the entrance to the airfield, where the convoy waited as the buses moved to the plane one at a time to unload, another platoon stood watch in case of problems on the waiting buses. This platoon also served as the company quick-reaction force. It had a dedicated 2½-ton truck that remained at the platoon position with its riot gear and loaded shotguns on board. Upon receiving the proper code word from the company commander, the platoon would immediately load the truck and move to the loading site to help restore order.

The route between the camps and the airport was patrolled and secured by the battalion's Company D. This company would serve both as a reaction force in the event of an incident on one of the buses and as a security element against anyone protesting the move. At Howard, Air Force security police (SPs) were responsible for maintaining control of the migrants once they were put on the planes. Other SP units secured the airfield, and several on horseback patrolled the edge of the field in the event a migrant escaped from the soldiers of Company C.

For all of the soldiers involved, except for the reaction force following the convoys, the uniform was BDUs with soft caps and no LCVs. The purpose was to reduce the confrontational appearance of the operation. Because of the fears of the AIDS virus, known to be present in the camps,

the soldiers were issued surgical gloves but were not allowed to wear them because of concerns about appearances. The gloves, along with the regular black leather gloves, were kept in cargo pockets in the event they were needed. It was, of course, an imperfect solution. If these gloves were needed, there would be no time to put them on. Each soldier in the task force carried a can of police-strength pepper spray. And certain individuals, especially on the bus teams, carried electric stun guns.

Several days before the operation, the task force held a full-scale rehearsal. Watching this dry run were members of several non-governmental organizations, many of whom intellectually and emotionally disliked the military and disagreed with the repatriation of the migrants to Cuba. Although these people were not converted by what they saw, neither did they see anything they could use against the U.S. forces.

For the execution of the mission, the responsibility for the different camps was divided between the two battalions of the task force. There was some mixing of work on certain days (companies from one battalion moving the migrants and a company from the other battalion loading them on the planes), but as a general rule the battalions worked as units.

After all the preparation for the worst-case scenario, the mission went smoothly. The migrants were nervous but nonviolent. Given this lack of violent response, and to soften the public image of the movement, the riot batons the soldiers carried were removed and stored nearby.

All along the route, but especially at Howard AFB, large numbers of reporters were gathered to watch the transfer, but those hoping to record violent incidents and confrontations were disappointed.

Working at Howard AFB, Company C did a large amount of direct coordination with Air Force SPs—both those stationed at Howard who carried out the airfield security mission, and the composite squadron that had come to serve as escorts and guards on the flights to Cuba. These coordinations went smoothly because they were made at the lowest possible level instead of through several levels of staff. The main coordination was to determine at what point the Air Force would become responsible for the migrants. For this mission, the two sides agreed that the migrants would be the responsibility of the Air Force as soon as they crossed the threshold of the rear ramp of the transport plane.

One thing that delayed the joint training of the Army and Air Force teams that manned the airfield was the organization of the Air Force squadron. Instead of sending an organic unit to perform the mission, the Air Force formed a composite squadron made up of SPs drawn from 13 different Air Force bases. As a result, members of the squadron had to spend their first several days in Panama organizing themselves and undergoing the training the 101st task force had already completed at Fort Campbell. Still, the inter-service teamwork was excellent despite this delay in getting to joint training.

- There is no substitute for a disciplined, cohesive unit in an operation of this kind. The soldiers who went to Panama to move the Cuban migrants had been trained primarily for combat operations, but the discipline developed for war also served well in this peacetime operation. During the entire operation, there was not one serious disciplinary incident that adversely affected the mission, by soldiers either on or off duty.

- Infantrymen are trained to be aggressive and to respond with force to unclear or threatening situations; this is necessary for combat. But we must ensure that this aggressiveness is secondary to the discipline that requires soldiers to follow any orders, any time. We must train our soldiers to have the flexibility to apply the skills learned for use in war to the requirements of operations other than war.

- Pre-deployment training is critical. Rarely will peacetime operations require deployment in 48 hours. More often than not, there will be time for some mission-specific training, and because this training is critical, it must be done as effectively as possible. The 1st Battalion, 502d Infantry, did this in two ways: Bringing in soldiers from other units to serve as opposing force to make the most of training time for the deploying soldiers, and seeking out subject-matter experts to serve as instructors for relevant classes. In the case of this battalion, and in many other operations other than war, the best subject-matter experts available were the divisional MPs.

As a rapid deployment force, the battalion was trained and prepared for short-notice deployments. This meant that when the call came to move, the unit and its soldiers were free to concentrate on their pre-deployment training instead of spending this valuable time arranging family care plans and taking care of other personal business. In today's smaller army, no unit can count on having 30 days to prepare for deployment on a real-world mission.

- Direct coordination between units at the lowest possible level went a long way toward facilitating teamwork between the different units in the operation. By directly coordinating the migrant handover on the ground, the officers in charge of the Air Force SPs and the infantry companies with the airport mission developed a simple, workable plan and an agreement that was accepted by both sides. If this coordination had been done through several staff layers, it would have taken much longer and probably would not have worked as well.

No two operations other than war in the future will be exactly the same, but the lessons learned from the experience of the 1st Battalion, 502d Infantry, in Operation *Safe Passage* can be applied to any non-combat mission our forces may be called upon to perform.

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INTELLIGENCE Must Drive Operations

LIEUTENANT COLONEL MICHAEL T. FLYNN

A lesson learned again and again at the Joint Readiness Training Center (JRTC) is the central role the intelligence battlefield operating system (BOS) plays in the success of a brigade task force.

Leaders and soldiers succeed when they can accomplish their mission essential tasks under combat conditions. At the JRTC over the past year or so, the intelligence observer-controller (OC) teams have seen continued improvement in the staff work of brigade and battalion S-2 sections. After observing many S-2s during that time, the OCs have identified several keys to success, and I want to discuss some of them in this article.

The path to success lies in developing and applying sound standing operating procedures (SOPs) that are based on doctrine and on tested tactics, techniques, and procedures (TTPs). This article outlines many of the tools and techniques that have proved successful at the JRTC. To be prepared for success against the JRTC opposing force (OP-

FOR), or an actual opponent during operational deployments, intelligence leaders may want to consider incorporating these tips into their home-station training programs.

Solid S-2 section SOPs form the basis for successful intelligence input to the brigade task force. Successful brigade and battalion S-2 SOPs observed at the JRTC have been based on current doctrine; equally important, however, is the soldier's familiarity with the SOPs. Units often arrive with excellent SOPs that they don't understand and don't use.

Readily available in most of these SOPS, for those who take the time to read them, is the 90 percent solution to the difficult problems S-2 sections will encounter during their rotation. But when leaders and soldiers have not mastered their SOPs, the good information in them is never put to use. As planning time becomes short and fatigue becomes a factor, the effect of this lost knowledge becomes severe. By D+3—if the unit has not enforced a sleep schedule—fatigue reduces memory spans and diminishes attention to detail. Tasks that section members may have done earlier without direction now require increasing emphasis from key leaders. Detailed SOPs that outline tasks and responsibilities focus sections on their essential tasks, remind tired soldiers of their responsibilities, and provide guidance to soldiers covering for others who have become casualties.

Although the IPB process can be time-consuming, many of the doctrinal products can be completed at home station as part of the IPB "homework" phase.

Experience shows that effective S-2 SOPs cover six general areas:

- Intelligence preparation of the battlefield (IPB).
- Reconnaissance and surveillance (R&S) planning.
- Staff integration and synchronization.
- Section operations.
- Asset integration, with emphasis on intelligence and electronic warfare (IEW) assets.
- Intelligence support to the targeting process.

While different units will address each of these areas in different ways, the following are thoughts on each, based on current and emerging doctrine and successful TTPs observed at the JRTC.

Intelligence Preparation of the Battlefield

The IPB is a continuous four-step process of analyzing the threat and the environment in a geographic area. It sets the stage for the development of operations plans and orders and should draw on the expertise of all staff sections.

Although the IPB process can be time-consuming, many of the doctrinal products can be completed at home station as part of the IPB "homework" phase. Terrain analysis products, order-of-battle laydowns, and OPFOR doctrinal templates should be completed well before deployment. Successful S-2s have these products prepared in advance and are thoroughly familiar with them before beginning the orders process at the intermediate staging base, or at home station for units conducting airborne insertions. Unfortunately, many times these products are forgotten after the initial order is prepared. OCs find well-prepared products rolled up in the corner of a tactical operations center (TOC) or buried in the back of a vehicle. With a little updating, these products have proved to be useful throughout the unit's rotation. Yet they are typically discarded after the first order is issued.

We have to do better than this. As an S-2, you must know what you have available and then use it. During the abbreviated planning process, when time is especially limited, these IPB products become critical.

The following are the four steps to IPB:

Define the battlefield environment. This step includes a number of sub-tasks. The critical first step is for the battle staff to determine the task force's area of interest (AI). An AI, as defined by doctrine, is determined by conducting a terrain analysis and an analysis of friendly and enemy capabilities. It also includes the area of operations (AO), areas adjacent to and extending into enemy territory to the objectives of current or planned operations.

Along with other key staff members, the battle staff nominates to the commander an AI that contains all of the elements that are likely to influence the task force during the time period for which the staff is planning. There are no hard-and-fast guidelines for choosing an AI. The staff members rely heavily on their own judgment and experience and on a sound analysis of time and space factors for both friendly and enemy units. As part of the initial intelligence estimate briefing during mission analysis, the S-2 must present the AI, its characteristics, and the reasons it was chosen.

He must focus the commander on those aspects that will have the greatest effect on friendly and enemy operations. One example is enemy insurgent forces that are expected to conduct infiltrations into the unit's AO within a certain period of time. Another is the enemy situation along ground lines of communication that friendly forces must cross or use to get into the AO. A third is a key terrain feature such as a ridgeline that may provide excellent observation into the AO but is not currently controlled by the unit. This type of information gives the commander additional data to consider as he formulates his own estimate, conducts his own IPB, and begins to develop and refine his guidance.

Describe the battlefield's effects. In this second step, the S-2 must avoid the common mistake of presenting the commander and staff with large amounts of data on the battlefield without describing how the battlefield will affect and shape the fight. When done well, this step of the IPB process paints a clear picture of the opportunities and limitations the environment presents to any force operating in the AI. These effects are portrayed primarily through the modified combined obstacles overlay (MCOO) and a consideration of the factors of OCOKA—observation and fields of fire, cover and concealment, obstacles and movement, key terrain, and

avenues of approach. Doctrine states that the MCOO is a combination of overlays that becomes a graphic presentation of the way the terrain affects operations, but this is not realistic at brigade and battalion level. The combination includes such overlays as hydrology, crossing sites, hot landing zones, the different aspects of terrain, and so on. At the brigade and battalion level, you need one that focuses you, the staff, and the commander on the important aspects of the terrain.

Understand how you and the enemy will fight; see the terrain and how it affects both of you. As you walk the commander and staff through the MCOO, describe the items of OCOKA. The emphasis, however, must be on key or decisive terrain and the avenues of approach, mobility corridors, and infiltration routes. Additionally, the movement rates and displacement times for both friendly and enemy forces as they move along these approaches must be addressed.

Any exacerbating or mitigating effects of anticipated weather conditions should also be addressed during this phase of the IPB process. But don't waste time with the weather. Everyone knows its hot or cold, raining or snowing. Instead, discuss the effects of illumination on night ground movement operations and the effect these will have on your own and the enemy' ability to fight at night; discuss the effects of foot mobility or vehicle mobility (wheeled or tracked) along infiltration routes or identified avenues of approach. Talk about the dewpoint in the morning, what it will be at a given time, and the ground fog that a high or low dewpoint will create and the effects it will have on aviation operations at first light. This is the type of detail a commander and an S-3 need to know.

Finally, coordinate with the air defense artillery (ADA) officer to make sure he discusses enemy air avenues of approach during his portion of the briefing and with the task force engineer to ensure that he discusses the enemy's mobility and countermobility. Staff integration during the initial IPB process is key to getting at this enemy that our task force will face.

Evaluate the threat. In this step, be thorough, presenting the enemy situation as you see it. First, discuss the enemy's composition, without regard to weather and terrain. At this point, identify your best estimate of the forces available to the enemy, their current manning and equipment levels, and their organization. This is normally done using line and block charts, annotated with figures showing the enemy's current strength and the numbers, types, and capabilities of his weapons

In this stage of the IPB process, many S-2s get into trouble by presenting too much information. Limit your description to the forces and weapon systems that are likely to influence your unit's fight; for example, if your unit must conduct airborne or air assault force entry operations, enemy air defense systems become high-payoff targets (HPTs). If you are in the midst of search and attack operations, enemy mortars may be critical. These decisions are based on an analysis of METT-T (mission, enemy, terrain, troops, and time). But it is your responsibility to focus the commander and staff members on the systems that present the greatest threat.

This step of the IPB can be long and detailed and may tax the staff's patience. Bringing in facts about troops and weapons that are not likely to affect the mission only makes it more difficult to hold their attention. For their part, other staff members must be patient during this phase; this is the reason they have come together. This is the enemy you are about to engage in warfare, and many lives will be lost if you don't fully understand him and the way he fights.

Remember that during this portion of the laydown, you brief the entire staff. While the discussion of threat bridging assets, for instance, may not interest the ADA officer, they are as important to the S-3 and the task force engineer as the laydown of threat air assets is to the air defenders. After detailing the enemy's forces and weapon systems, you must translate this into enemy strengths and weaknesses. This analysis should be broken down by enemy BOSs and can be displayed graphically. These charts should highlight the threat capabilities that pose dangers to friendly forces and the enemy weaknesses we can exploit.

A brigade S-2 needs to include a level of detail that is of interest to company commanders; a battalion S-2 needs to talk to the platoon leader level.

Determining threat courses of action (COAs). The S-2 must always present the most probable COA and the most dangerous one. The basis for this projection is the S-2's current situation template and event template. Several techniques for presenting these COAs have been used successfully at the JRTC. Cartoon sketches, map enlargements, and terrain models allow the entire staff to view the COA at the same time. The most common technique, using an overlay on a 1:50,000 or 1:25,000-scale map, is quick and effective, but it is difficult with large groups of people.

Regardless of presentation technique, the entire staff and subordinate commanders must walk away from this portion of your briefing with a clear understanding of the way you think the enemy will fight. A technique that you or a brigade or battalion commander can apply is to survey staff and subordinate commanders after the briefing and ask them how they expect the enemy to fight in their AO. As OCs, we do this routinely.

For example, after sitting through an entire order, many company commanders are still not completely sure of the enemy situation in their assigned areas, and this is an important aspect to consider. If you are a brigade S-2, you need to include a level of detail that is of interest to company commanders; if you are a battalion S-2, you need to talk to the platoon leader level.

The next time you are briefing your unit's subordinate

commanders and staffs, keep in mind that a company commander does not have a staff. He has only himself, his XO, and a couple of sharp lieutenants and noncommissioned officers, many of whom have little experience.

Note that while current doctrine and many unit TTP pamphlets still say the S-2 should identify at least three enemy COAs, experience shows that this is impractical. Battalion and brigade staffs simply do not have time to evaluate and plan against three COAs, and presenting them with so many tends to muddy the clear threat picture you need to portray.

Instead, decide upon and present the most probable and the most dangerous COAs, and then be prepared to present likely enemy actions on these, when time permits. Remember too that the most probable and the most dangerous may be the same. When you believe this is the case, look for other information you may have missed. Information such as R&S reports or battle damage assessments that may have been considered overestimated earlier can now become extremely important. Try not to close any of the enemy's options; often he will select the very one you just closed.

After completing the essential products discussed so far—the MCOO, situation and event templates, order of battle charts, and threat capabilities matrices—disseminate them down to subordinate S-2s and, for battalion S-2s, to company commanders, in a usable format. Copies should also be forwarded to the next higher headquarters. Intelligence staffs often hold onto their products until subordinate staffs and commanders are well into their planning processes. This makes parallel planning difficult and almost ensures that the intelligence picture will vary at each subordinate level. While professional differences are likely between intelligence staffs at different levels, quickly disseminating products will bring these disagreements to the surface early in the planning process and help produce a common picture of the battlefield. Getting intelligence products up to the next higher headquarters lets that staff know when a subordinate unit's staff has a different, and possibly more correct, projection of enemy intentions.

Do not think the IPB process is finished at this point. New information must be analyzed constantly. Close battle tracking of new information, combined with your understanding of threat doctrine and capabilities, should result in predictive intelligence.

Remember that we are intelligence professionals, not historians. Descriptions of past actions are useful only if they contribute to your ability to predict the enemy's future activities. Too often, S-2s are not able to produce this predictive intelligence for a number of reasons. Perhaps they have not mastered their opponent's order of battle and tactics, or their sections are not accurately tracking the current battle, thus depriving the S-2s of valuable input to their threat models. Sometimes S-2s give in to a natural tendency to let down after the order is prepared and briefed. In any case, stay ahead of the enemy as well as other staff members, and try to anticipate the enemy's next action instead of reacting to his last. In the final analysis, an S-2 who must constantly react to enemy actions has failed.

One valuable technique for predictive intelligence observed at the JRTC—and reinforced through practical application by many units during Operation *Joint Endeavor* in Bosnia—is the use of pattern analysis.

Pattern analysis is based on the premise that the enemy's selected course of action results in certain characteristic patterns that may be identified and correctly interpreted. Over time (usually about five days to a month), S-2s who use good battle tracking techniques can predict such events as periods of enemy reconnaissance activity, windows of increased mortar or sniping attacks, and peak levels of civilian activity during the course of a day.

Every enemy and every battlefield develops a pattern of activity. For an elusive foe, however, we must look at each event on the battlefield and determine whether there is a unique pattern. It is up to the intelligence professionals to assess what that pattern is and what it means for future operations, both friendly and enemy.

Reconnaissance and Surveillance Planning

R&S planning is a major piece of the intelligence process at brigade and battalion levels. R&S requires more than an S-2 and a scout platoon leader sitting in an operations center, trying independently to plan and coordinate a critical combat operation. The details of R&S planning and execution require a completely orchestrated effort by the commander and the entire staff.

A thorough discussion of R&S planning and execution would require a separate article. But if you consider only the implications of the following questions, the stage will be set for a successful effort:

- Is the R&S plan based on approved priority intelligence requirements (PIRs)?
- Is the plan based on wargamed enemy courses of action?
- Are indicators developed to help the S-2 satisfy the commander's PIRs?
- Are units tasked in an operations order or fragmentary order to collect information?
- Do units understand that they are tasked to collect information for the S-2?
- Is there a system in place to track the results of the plan?
- Are units reporting as required—that is, meeting the reporting timelines as directed by the S-3 and S-2?
- Is there a system for debriefing collection assets? Does the SOP require that all collectors provide feedback to the S-2 upon completion of their missions?
- Has the S-3 included R&S taskings in paragraph three of the order, under Tasks to Subordinate Units, or are they buried in an appendix or annex?
- Has the commander been briefed on the R&S plan and given his approval?
- Is the S-2 making the most of all available assets to conduct R&S?

• Has the R&S plan been coordinated with adjacent units?

R&S remains a weak point throughout the force, and failures can usually be traced to two root causes: Units do not follow their SOPs for R&S, and commanders do not demand that R&S missions be planned as carefully as other combat missions. Commanders at the JRTC who have planned and executed R&S missions with the same level of detail as any other combat operation have achieved great success. In most cases, however, R&S operations are given less consideration in the planning products, and the results have been disappointing.

Staff Integration and Synchronization

Staff efforts at the integration and synchronization of BOSs are not working. Successful S-2s have aggressively tapped into the system or systems that a battalion or brigade task force brings to the fight, but most S-2s overlook expertise that is available inside their own TOCs. The best available source on threat BOS capabilities is usually the staff BOS representatives.

Just as the ADA officer can contribute to the S-2's portrayal of enemy ADA systems and air avenues of approach, other BOS representatives can give the best advice on threat capabilities in their areas. For example, during search and attack operations, we see the S-2 preparing a situational template and the engineer preparing an enemy minefield template independently of each other. The lack of integration by these two key staff officers causes some serious problems. One is the commander's inability to visualize the enemy as clearly as he needs to. Another is the improper use of engineer assets because the minefield template has nothing to do with the enemy situation. S-2s must actively seek out input from other BOS representatives and become familiar with the systems subordinate units bring to the battle.

A functioning staff must have this open exchange of information among its members, but this can happen only when the staff develops a solid, professional working relationship. This does not mean that all staff members must like each other; on the contrary, staff members must avoid dwelling on personalities and focus instead on addressing the commander's concerns. Although the S-2 alone cannot establish such a relationship throughout the staff, he can set a good example by remaining open to input from all staff members.

Section Operations

Section operations should be driven by solid SOPs and staff battle drills. The goal when assessing section operations is to measure the section's ability to conduct its essential tasks smoothly, without requiring so much input from key leaders and supervisors that they are distracted from the planning process.

The following are several tasks that fall under the general heading of section operations. As you perform your self-assessment to begin planning your section's training program, ask how well your section can perform these basic but essential tasks:

- Journal maintenance.
- Request for Intelligence Information log.
- Intelligence Summary log.
- Database management.
- Information flow.
- Communications.
- Battle Damage Assessment tracking.
- Analysis.

Although the SOP should be the foundation for the way you and your personnel operate—especially when fatigue sets in and the operational tempo increases—not all section operations have to be in an SOP. Another idea is to create "Smart Cards" or checklists of the section's critical functions. These are similar to a battle drill but literally provide a soldier a step-by-step list of what to do in certain situations. Ideally, these are documents that can be put into the aviators' blue books, or similar sturdy binders, to use during tactical command post or TOC operations or during battlefield circulation. They must be easily understood and drilled during home-station training.

Commanders at the JRTC who have planned and executed R&S missions with the same level of detail as any other combat operation have achieved great success.

Your section must be functional, regardless of the circumstances; you must review your section operations SOP with your entire section. Include a discussion with your junior enlisted soldiers and NCOs. The OCs at the JRTC often find soldiers with great ideas, but nobody is asking for their help or nobody is listening.

Asset Integration and Utilization

Integrating collection assets into a task force's intelligence operations is a tough job, made more difficult by one common shortcoming: S-2s typically do not understand the capabilities of these collection systems or how they are best employed. And things will only become more complex in the future as more national level assets and products are pushed down to battalion and brigade task forces.

For these military intelligence collection systems, a whole crew of experts is only a phone call away. Talk to your supporting military intelligence company and battalion about the systems they bring to the field. MI battalions and brigades also have experts on many of these national systems. And while arranging for this valuable training, don't forget to include the S-3 and the fire support officer so they will gain an appreciation for what these systems can and cannot do.

To be successful, an S-2 must also understand the capabilities of key collection assets that do not come from the MI side of the house. First and foremost, any maneuver S-2 who does not understand how scouts function, and how difficult it is to get "eyes on" a target while avoiding detection, owes it

to his task force to spend some time in the field with the scout platoon. The lessons learned will be invaluable and of the type that cannot be learned from books alone.

Similarly, S-2s must learn the ranges, capabilities, and employment considerations of systems such as TOW and Dragon night sights and platoon early warning devices. Do you know how many mils the Q-36 counterbattery radar scans at one time? Or what types of optical systems a combat observation lasing team carries? If not, talk to your fire support officer. You must be familiar with the whole array of potential collection assets within your task force. While you will probably never thoroughly understand all of them, you must know the key planning considerations for each so you can integrate them into the task force collection effort.

Intelligence Support to Targeting

Intelligence support to targeting provides the focus the staff needs to bring all fires, lethal and non-lethal, to bear against the commander's HPTs. This support begins in the initial steps of the IPB process, where the S-2 identifies threat strengths and weaknesses and derives preliminary enemy high-value targets (HVTs) as he develops his situation and event templates. These HVTs are refined during wargaming when the S-2 plays a free-thinking, uncooperative enemy while fighting his situation and event templates against friendly COAs. Later, these HVTs form the basis of the commander's HPT list and drive the collection effort to support the *decide*, *detect*, *deliver*, and *assess* functions of the targeting process.

To be successful, an S-2 must also understand the capabilities of key collection assets that do not come from the MI side of the house.

The targeting and synchronization process is the subject of intense discussion and continuing debate at the JRTC. Several products and techniques are generally regarded as essential for S-2s to support the targeting and synchronization process.

The following are some key considerations as you prepare for and participate in targeting and synchronization meetings:

- Identify the enemy's HVTs before the meeting, and brief them as part of your intelligence update.
- Know what collection assets are available, their capabilities and limitations, and when they will be available.
- Be prepared to recommend HPTs on the basis of the wargaming session.
- Be prepared to state when and where you believe those HPTs will appear on the battlefield (the event template).
- Recommend which collection assets should be targeted against those HPTs.
- Go through the same thought process to determine which ones should be used to conduct battle damage assessment.
- Review what your system will be for tracking and assessing the HPT.

Additionally, be prepared for the formal meeting with a specific set of information. There are various tools to use, but the suggestion here is to have an agenda and make the meeting efficient and productive.

Successful commanders and their S-2s training at the JRTC have understood the central role intelligence plays in their units' success. The S-2's ability to visualize the enemy and project enemy courses of action have been unequivocal and clearly presented. They have not been afraid to make the hard calls and aggressively argue their points of view with other staff members, when necessary. Additionally, once they have made their best estimate of the enemy's likely future actions, successful S-2s have also been able to integrate available collection assets into an effective collection plan, focused on their commander's PIRs.

A central theme is that intelligence drives operations. Success can be achieved only through the proper application of the IPB process and the development of specific PIRs, which are tied to decisions the commander must make. An IPB, well planned and properly executed R&S missions, a complete understanding of the way intelligence leads the targeting process, and total orchestration of the staff to understand the enemy and the terrain are critical elements that everyone on the staff must know. The S-2 is no longer the sole proprietor of intelligence; intelligence is everyone's business.

The suggestions in this article cannot take the place of a bold, aggressive S-2 in charge of his task force's intelligence effort. Nor is an aggressive S-2 who cannot do these things likely to succeed against a persistent enemy such as the JRTC OPFOR. But a strong S-2—willing to make the hard calls and able to orchestrate his efforts with the rest of the staff to support the commander's plan—will be prepared for success both at the JRTC and against an actual opponent. By reviewing the points detailed here, commanders and S-2s can set themselves up for success by building on the tough lessons others have learned at the JRTC.

Comments or suggestions on this article may be sent by E-mail: flynnm@bragg.army.mil; telephone DSN 239-1635/8500 or commercial (910) 432-1635/8500.

Depending on the rotation schedule, you may not receive an immediate response, but you will receive one, and your feedback will be appreciated.

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TRAINING NOTES

BATS
The Bradley Advanced Training System

COLONEL RONALD J. JEBAVY, U.S. Army, Retired

The Bradley advanced training system (BATS), when fully developed, will help address the full spectrum of doctrine, organization, training, leader development, maintenance, and soldiers as an infantry fighting machine. In training, BATS will serve as a precision gunnery trainer, provide combined arms tactical training, and assist in refining command and control and tactics, techniques, and procedures. It will also provide test planning and rehearsal, and record real-time test results.

Presently, the system features a digitized replica of the terrain at the National Training Center in California. Through manipulation of compact discs, however, BATS will be capable of projecting any terrain the U.S. Army Mapping Agency has digitized. It will eventually be possible for soldiers preparing to deploy to a location anywhere in the world to call up the digitized terrain of that site and "fight" on it again and again.

With its simulation common operating environment (SCOE), BATS can be configured to train crews not only for the A3 but for the entire Bradley family of vehicles—the battle command vehicle, the Bradley FIST (fire support team) vehicle, and the Linebacker air defense artillery vehicle. The approach of using tactical software and actual prototype system parts in the training system will also be used on the Crusader (artillery) and Grizzly (engineer) systems. The SCOE allows the developers to maintain concurrency with the real vehicle, the A3. Using both tactical software and SCOE, BATS becomes a high-fidelity simulator that can be updated at relatively low cost.

Can a training system be developed early enough and be realistic enough to substitute for the actual prototype combat system? With some changes in the acquisition system, using the integrated product team approach and forward thinking on the part of everyone involved—the Infantry Center, the Bradley Fighting Vehicle Manager, and the TRADOC System Manager's offices, and the prime contractor for BATS—the Bradley Program has done just that. It has produced a remarkable simulator, years ahead of schedule and below the projected costs.

The 29th Infantry Regiment at Fort Benning used a BATS training simulator to train the trainers and then train soldiers on the A3. BATS is being developed in phases, each phase being linked to critical milestones in A3 fielding.

In Phase 1, BATS was used to prepare the trainers, testers, and crewmen who participated in the Bradley A3 Limited User Test (LUT) 1 in December 1997.

BATS is a virtual reality simulator, capable of replicating a simulated battlefield environment. A soldier sitting at the commander's or the gunner's station will think he is in an actual A3 turret. The commander's hand station, data entry tool, system control, sight control panel, tactical display, and commander's independent viewer are configured like those in the actual A3.

In many cases, BATS components are actual items from the Bradley A3 production line. The turret is a spatially correct fiberglass molded enclosure that is virtually identical to the actual item. Even the seats are A3 items. Vision blocks, two for the gunner and six for the commander, provide normal out-the-window views that are provided by an image generator to flat-panel displays having the same field of view as the real vehicle. The improved Bradley acquisition system, shared by the gunner and the commander, contain all the reticles, stadia lines, and symbols. Targets appear in the sights in the proper size, magnification, function, and range.

The driver's station is identical to the commander's and gunner's stations. Most equipment is actual A3 production-line hardware items. This station contains an actual gear selector, hand

brake, steering and pedals, fuel and throttle, compass display, driver's viewer enhancement (DVE), and vision blocks. Even the instrument panel contains parts from the A3. The driver's station, which was designed and developed but not required for the LUT 1, will be integrated into BATS later. As the driver operates his throttle, pedals, and steering, the vehicle sounds are heard and the vehicle moves—or seems to move—because of the changing landscape that appears in the vision blocks and DVE.

The dismount infantry squad compartment, like the driver's station, was not required for LUT 1. Nevertheless, its development is planned and work is under way. It features a spatially correct compartment that includes benches, troop hatch, vision blocks depicting the terrain over which the vehicle is fighting, and a squad leader's flat panel display. The integration of Land Warrior will follow.

Another outstanding feature of BATS is the instructor operator station (IOS), which provides a dedicated instructor/crew interaction station co-located with the simulator. A monitoring station also provides pre-briefs and after-action reviews for multiple crews. During Phase 1, in support of LUT 1, the IOS was able to initialize the system, start an exercise, and perform basic monitoring functions, including freezing and unfreezing action. In subsequent phases, additional control and analysis capabilities are planned for the station. The IOS will be able to provide environmental effects such as smoke, fog, and other obscuration. Finally, it will be capable of maintaining total control of any scenario, including the insertion of faults and malfunctions. The BATS internal computer will provide full crew performance scoring as well as student record management.

The mechanical sounds of a Bradley, weapons firing, and the chaotic noise of battle are all part of the scenarios that BATS users will experience. The software includes tracers, detonation, fire resulting from projectile impacts, smoke and changing light conditions corresponding to the time of day.

In Phase 2. BATS—with ever-increasing capabilities including dramatically improved software—will be shipped to Fort Hood to support LUT 2 in May 1998. Again in April-June 1999 at Fort Hood, BATS will support the all-important Initial Operational Test and Evaluation of the A3, which is Phase 3 of BATS development. In each phase, BATS will continue to expand its capabilities as a multi-role trainer until it is scheduled for fielding concurrently with the Bradley A3. The first-unit-equipped date is planned for the period August-November 2000.

The BATS approach, from its inception, was to maximize the use of hardware and software from commercial off-the-shelf sources and Government programs. Of particular note is the fact that the BATS architecture accommodates operational hardware and software "drops" from the BFV A3 program as they become available. This simply means that BATS will use actual hardware and software created for the A3 instead of inventing hardware and software to look like the combat system. This approach has some recognizable advantages. The real-time transfer of hardware and software from the A3 program achieves substantial cost, technical, and schedule benefits—a result that could be achieved no other way.

In summary, BATS was delivered at a crucial juncture before LUT 1 began. It was a team effort between the Government and the contractors to place a training system in the hands of the users and testers at a critical time to exploit its utility and growth potential. The result will be an outstanding system, developed concurrently with the Infantry Center's oversight and interaction.

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JRTC Reflections
Of an Enhanced Brigade Commander

BRIGADIER GENERAL FREDERIC J. RAYMOND

The Florida National Guard's 53d Separate Infantry Brigade and attached units completed their 1995 rotation at the Joint Readiness Training Center (JRTC) and returned to home station. The lessons learned from that training have clearly been the most visible and continuing reminders of that experience, but other remembrances have been equally beneficial. Let me share with you my thoughts and observations:

One of the major hindrances we

faced in our efforts to prepare for the rotation was the absence of institutional knowledge in the brigade task force about the combat training centers, and specifically the JRTC.

As a result, we put more than 200 soldiers, primarily junior officers and NCOs, into the maneuver box at the JRTC within the next 12 months as augmentees with three different brigades from the 101st Airborne Division. We coordinated with each of the brigades several months before their departure from Fort Campbell and identified the individual augmentees, their duty positions, and their assignments within the rotational brigade. This coordination helped match the augmentees with assignments that enhanced their knowledge of their duty positions. (The task force units are shown in the accompanying box.)

To reduce the cost of this training, we deployed the augmentees from Florida on C-130 aircraft directly to the intermediate staging base in Alexandria, Louisiana, where they linked up with the rotational brigade. They returned, again by C-130, from the Army airfield at Fort Polk on the day the maneuver exercise ended. These augmentees provided valuable experience that we incorporated into our train-up for the rotation.

The plan we devised in preparing for the rotation became the model for all our subsequent training. Our rifle platoons' preparation for their movement to contact (MTC) live-fire exercise (LFX) serves as a snapshot of this plan.

First, we ensured competency with individual and leader skills before undertaking the collective tasks associated with the platoon movement to contact. We worked squad MTC LFXs during our annual training period in the summer of 1994 and followed with platoon LFXs on weekend training in September, then again on another weekend two months before our deployment to the JRTC in June 1995.

Both the 101st Airborne and 82d Airborne Divisions were key players in this preparation. The 101st furnished mobile training teams that assisted in the leader training, while the 82d provided observer-controllers (OCs) who coached and mentored on our final LFX. The net result of this focused and concerted effort was successful platoon performance on the challenging MTC live-fire range at Fort Polk. The time and energy we spent in preparing for these exercises paid additional dividends in the performance of our soldiers in their engagements with the opposing force (OPFOR). In my judgment, this performance justified the allocation of our limited time to small-unit training and the development of proficient squads and platoons through stressful collective training, as in LFXs.

We tried to apply the same concept to our staff training, but with less success. We were able to bolster the skill levels of our staff personnel, and we thought we had achieved enough competency in executing staff functions and in the performance within our tactical operations centers (TOCs). Where we fell short in our training was in failing to inject more stress into the training regimen.

The commander of the JRTC suggested techniques to introduce stress and sleep deprivation into command post exercises (CPXs)—for example, including "wild card" events and beginning CPXs after keeping everyone awake overnight. Since we normally conduct our CPXs on a weekend training assembly that starts on a Friday evening, we now plan to incorporate rehearsals and refresher training into the available hours between the initial unit formation on Friday and the start of a CPX on Saturday morning. The key, in any event, is to create conditions in short duration exercises that are similar to those a unit will encounter in continuous operations.

Training Objectives

We developed a time line and a scenario for the rotation that proved to be workable. Within this framework, the JRTC's operations group was able to craft enough tactical challenges to evaluate the attainment of our training objectives and give us meaningful feedback for future training. In fact, this time line and scenario became the standard for subsequent enhanced brigade rotations.

Two aspects of our scenario are worth mentioning: First, we did not conduct a forced entry into our operational area. Instead, the brigade task force was inserted as a follow-on force and conducted a battle handoff from a friendly force that was maintaining security of a flight landing strip. We then used the strip as a base to build up our combat power. This particular aspect, in my view, mirrors the most likely method of deploying the brigade in support of a contingency operation. We also embellished our scenario by nearly doubling the usual number of civilians on the battlefield. This feature gave the brigade an opportunity to train in an environment that required coordination

TASK FORCE 53, JRTC 95-08

- HQ 53d Infantry Brigade (Separate)
  - Infantry Battalion (FTX) (2)
  - Infantry Battalion (CPX) (1)
  - Field Artillery Battalion
  - Support Battalion
  - Brigade HHC
  - Engineer Company (-)
- TF 419 Aviation Group (FLARNG)
  - Avn TF HQ
  - AH-64 Company (2)
  - Assault Company (UH1H)
  - Medium Lift Company (CH47) (GAARNG)
  - MEDEVAC Company (-)
  - Air Traffic Control Platoon
  - Weather Flight Detachment
  - Maintenance Slice
- Heavy Team (E/348 Cav) (GAARNG)
  - Company FIST
  - Heavy Engineer Section
  - ADA Section (Stinger)
  - Liaisons
- 3-20th Special Forces Group (-)
- .(SOCCE)
- 486th Civil Affairs Battalion (-)
- 4th ANGLICO (USMCR)
- A/711 Signal Battalion (ALARNG)
- H/1-21 Infantry (-) (LRSU) (ABN) (GAARNG)
- 278th Chemical Company (TNARNG)
- 337th MI Battalion (-) (USAR)
  - Company HQ (-)
  - Collection Company (-)
  - Intelligence/Surveillance Company (-)
  - Interrogation Team
  - Maintenance Element

and liaison with several private and governmental agencies, much the same as we must do when we deploy in support of state and local civil authorities.

The only way I would change the scenario, as I look back, would be to make the defend task the brigade's main mission and allocate more time to its accomplishment. While search and attack provided excellent training value, defend is probably the most likely initial mission a light infantry enhanced brigade can expect upon activation and deployment and should therefore be given priority in training. From my perspective, the training plan to prepare the task force for the rotation was about right. We were notably successful in acquiring the knowledge of what to do.

Two leader training sessions, the augmentees with the 101st Airborne, and JRTC OC visits to home station during the train-up had the desired effect on the brigade. In addition, our senior evaluator for the annual training period, who commanded a brigade of the 101st, conducted a series of evening seminars for the brigade leaders. These sessions covered subjects ranging from how to organize and operate at the intermediate staging base to tactics, techniques, and procedures to consider during the execution of the search and attack and defend missions.

Of course, knowing what to do and actually doing it can be quite different. We struggled to complete tasks that typically would not seem very difficult. As expected, the OPFOR contested all movement on the battlefield, but they were more effective than anticipated and their actions exposed a number of our training deficiencies. Convoy operations and force protection, for example, were identified and incorporated into plans for our next annual training period.

Conversely, we did enjoy a number of successes. The insertion of the task force into the operational area included a very successful night air assault of a field artillery battery and an infantry battalion by a blacked-out helicopter. We conducted a total of 17 LFXs—six MTC, six 81mm mortar, two 107mm mortar, and three artillery battery. The brigade's tactical standing operating procedure was first-rate document and became the model the JRTC offers to rotational units.

TRAINING OBJECTIVES

Conduct air deployment from ISB into operational area, and sustain force through aerial resupply.

Exercise C2 of brigade task force operations.

Establish and maintain communications over extended distances.

Protect the force.

Provide logistical and administrative support to sustain a geographically dispersed force.

Conduct CASEVAC in sufficient time to preclude fatalities (died of wounds).

Conduct continuous operations for nine days.

Synchronize battlefield operating systems.

Command emphasis on physical fitness and soldiers' loads resulted in minimal heat casualties, and the completion of risk assessments by subordinate units insured a safe rotation with no major injuries. Finally, the 53d Brigade, with assistance from combat service support units of the Florida National Guard, set a new standard for post-rotational clearance at the JRTC. I attribute this latter accomplishment to a number of factors, not the least of which was keeping most of the task force in the field until we had cleared the maneuver training areas, which we did in a day and a half.

I have often been asked what I would do differently if the rotation were reenacted. Unquestionably, I would place far more emphasis on force protection and the training of battlefield survival skills. Too often, the mindset of the troops regarding the OPFOR seemed to be "out of sight, out of mind." Consequently, they were frequently surprised by OPFOR-initiated contacts and paid the price in casualties.

The absence of a well-trained finish force—in the form of a mechanized-armored team or an airmobile infantry unit, possibly supported by attack helicopters—was a real detriment. The OPFOR's lack of tactical mobility can be exploited, but success depends on swift execution by a unit whose primary task is a finish force mission. The occurrence of fratricide incidents was a major disappointment. Poor fire control measures and imprecise graphics were the primary causes.

On a more personal note, I would spend more of my time circulating on the battlefield. Face-to-face meetings with subordinate commanders can be like a dose of reality, and there is no substitute for seeing things for yourself. A side benefit is that it takes you away from the TOC, where you can easily be distracted by apparently important matters that may not turn out to be the best use of a commander's time and influence. From my perspective, battlefield circulation is time well spent, in spite of any associated risks.

The tempo of the operations also had an unanticipated personal effect. I had been warned about the way a rotation will wear you out. So I made it a point to get four hours sleep each night and actually felt good physically during the entire rotation. What I didn't realize was how mentally fatigued I had become as the rotation progressed. The cumulative effect is not easy to detect. Although I felt physically alert, my perception and ability to comprehend diminished over time. I look back and ask myself, "How did I miss that piece of information or the significance of that specific event?" This is a phenomenon that afflicts all leaders to some degree under these conditions, and its effects should be factored into the decision making process.

Truly, the most gratifying aspect of the rotation was the enthusiasm and motivation displayed by the brigade's young enlisted soldiers. They worked and fought hard throughout the rotation and earned the respect of everyone who observed them, OPFOR and OC alike. They were still fired up and enthusiastic during the recovery operations. It's hard to imagine that they could get excited about taking down concertina wire, separating trash, repackaging

Class IV, and the like, but they did. Without question, they were the strength of the brigade.

The success we realized at the JRTC is even more remarkable when one considers that—aside from the assistance provided by the 101st and 82d Airborne Divisions—we trained ourselves, to a great extent, in preparation for the rotation. We did not have a resident training detachment (RTD). In fact, the only full-time helpers we had for support were the U.S. Army Readiness Group, stationed at Patrick Air Force Base in Florida, and two active-duty advisors assigned to the brigade headquarters. During the prime training period for the rotation, the only additional active component support we had available to us for training assistance was a team of 35 training assessment model evaluators from the 101st Airborne Division.

In addition, during this period the brigade's full-time manning was at 55 percent of its required level, which compares to a full-time force that represents three percent of the brigade's total authorized personnel strength.

I believe the legacy of the JRTC for us will be what we do with the results. For the first time ever, we have a complete picture of performance within the brigade, from top to bottom. The JRTC take-home package is our blueprint for future training. We used it, for example, to obtain a mobile training team from the 82d Airborne for help in improving information management in the brigade TOC and for annual training in 1996. It should continue to be our guide for years to come, modified by feedback we receive from our yearly training assessments. We plan to continue on the path we took in preparation for the JRTC: staff training, leader training, small-unit training, and a concentration on the basics. In addition, we have an obligation to pass on to others what we have learned from our experience. We took a step in this direction in September 1995 when we presented our JRTC lessons learned to members of the 39th Separate Infantry Brigade, which would follow us to the JRTC in 1996.

What does the future hold for us as an enhanced readiness brigade? Clearly, organizational changes will continue as we move toward the implementation date of 1 October 1998 for full enhancement. We are standing up our military intelligence company and expanding our air defense capability while receiving replacement and additional weapons and equipment throughout the brigade. The major equipment shortfall that we will continue to face into the near future is the absence of the single-channel ground airborne radio system (SINCGARS) and mobile subscriber equipment (MSE). In fact, we had to borrow this equipment to use during our JRTC rotation.

On a brighter note, the training support for both our weekend training and our annual training has taken shape and promises to be a definite improvement over past endeavors. Although our RTD is not yet fully staffed, its members have already had a significant effect on the quality of our training. During our 1996 annual training, we had our first experience with U.S. Army Forces Command's Ground Forces Readiness Enhancement initiative. The 3d Regional Training Brigade, 87th Division (Exercise), the 82d Airborne Division, and our RTD all contributed to a productive and successful training event. The future will only be better. The more we work together as a team, the more effective we will become, with the 53d Brigade as the principal beneficiary.

Our charter is clear: Sustain the performance strengths identified at the JRTC and correct the deficiencies. We now have the team in place to carry out our charter.

Brigadier General Frederic J. Raymond commands the 53d Separate Infantry Brigade, Florida Army National Guard. Commissioned from Officer Candidate School, he served in Vietnam as a rifle platoon leader, reconnaissance platoon leader, and rifle company commander with the 1st Battalion, 327th Airborne Infantry, 101st Airborne Division. He is a 1972 graduate of the University of Tampa.

Reengineering Unit Training
The Motor Pool as an Assembly Area

MAJOR ROBERT P. CERJAN

U.S. military operations are changing from a forward-deployed presence to a force-projection mode. Based on current operations—too much to do, too little time, and dwindling resources—we are compelled to reconsider our approach to training. Commanders at all levels must reengineer unit operations to focus on integrated, multi-echelon training. One aspect of this strategy establishes motor pools as assembly areas, which makes it possible to integrate mandatory training with training based on unit mission essential task lists (METLs).

Field Manuals (FMs) 25-100, *Training the Force*, and 25-101, *Battle Focused Training,* were written with a

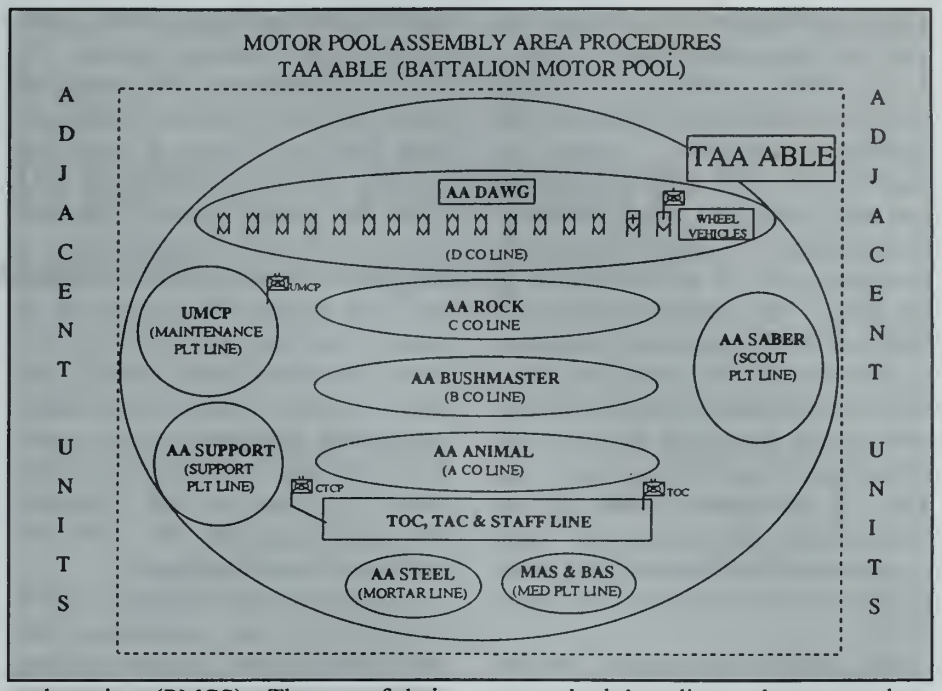
General Defense Plan Army in mind (fixed, predictable enemy and long lead-time training plans at every level). Part of reengineering for a contingency based Army is the idea of the commander's running estimate. Our current environment requires that we obtain continuous, focused information (commander's critical information requirements, or CCIRs) and make adjustments to keep pace with shifting realities instead of staying on course with a set of outdated priorities.

The philosophy of our strategy includes the fundamentals of battle command: *See yourself, see the enemy, and see the terrain.* Leaders must know the status of all vehicles, equipment, and personnel; identify, request and use resources and deflect training distracters; and apply all assets to accomplish the mission—that is, battle-focused training. All of this is accomplished while maintaining a running estimate and the proper orientation through a clear understanding of the commander's intent and visualizing the desired end state.

FM 71-123, *Tactics and Techniques for Combined Arms Heavy Forces: Armored Brigade, Battalion/Task Force, and Company Team*, addresses types of assembly areas; it states that administrative assembly areas are organized and occupied with an emphasis on unit integrity, ease of operations, command and control, and the efficient use of facilities. As part of its reengineering effort, the 2d Battalion, 7th Infantry, 1st Brigade, 3d Infantry Division, has turned its motor pool into an assembly area.

As part of its reengineering effort, the battalion has turned its motor pool into an assembly area .

Most units spend their maintenance day, typically Monday, performing command maintenance and the rest of the week chasing the faults, deficiencies, and parts. Soldiers are engaged for a very limited amount of time in performing preventive maintenance checks and services (PMCS). The rest of their time is spent waiting for the mechanics to verify the DA Forms 2404/5988-E, identify the appropriate parts numbers, and order the parts. The commander should verify the parts requests, but he and the first sergeant are often in training meetings or other scheduled events.



Motor pool assembly area (AA) operations include more than just PMCS. These operations focus on preparing equipment and soldiers—conducting PMCS and bringing all combat systems to combat readiness; performing precombat checks (PCC); and concluding with a leader's precombat inspection (PCI). The skill, knowledge, and ability required to bring combat systems to combat readiness are perishable, but focusing the unit's efforts each week can keep soldiers proficient in these skills.

Consider this operation in relation to preparing for Bradley Table VIII gunnery: You must conduct PMCS on the vehicle, ensure that the 25mm gun and the coaxial machinegun are functional and boresighted, and ensure that all communications are operating properly. In this area, you are ready to go downrange, or to combat, except for having live ammunition on board.

Carrying out this concept requires the battalion to establish the assembly area (see diagram). We will review this process at both battalion and company levels:

Battalion. AA operations are best conducted with a battalion formation in the motor pool, with the battalion commander and command sergeant major addressing the unit. This sets the tone for the day's operation.

The battalion tactical operations center (TOC) is established along with the command net, including the combat trains command post (CTCP) and the administrative/logistical net. A unit can then conduct significant integrated training, such as training a new battle captain or a new specialist, instead of doing this during a division or brigade command post exercise.

The TOC monitors the company combat power, which retrains the staff as well as the companies on radio communications, specifically the perishable skill of frequency hopping and the associated tasks. TOC personnel may gather hourly combat power updates and prepare updates for the commander at any time, providing him with an expedient running estimate instead of waiting until the end of the day for an update and possibly a surprise or two.

The CTCP and unit maintenance collection point, which run their respective nets and monitor combat power, are capable of updating the TOC to ensure that the same information is

being passed across the command net. This also allows the battalion maintenance officer (BMO), the battalion maintenance technician (BMT), and the battalion maintenance sergeant to monitor and track deadlined systems and cross-level parts within the battalion as needed. The right people or parts are now on the net, just as they are in the field. This system also gives the BMO or BMT up-to-date information and enables them to contact the direct-support unit as the need arises instead of waiting until the end of the day to get information or until the next day to get a part. It also reduces deadline time, an improvement dear to every commander's heart, and reduces the number of entries on the front of the DA Form 2406.

The battalion commander has the option of running a maintenance management review or a modified commander's meeting at the end of the operation. With the battalion executive officer, company commanders, and BMO, the commander can assess the day's AA operations and base additional guidance on the results. The BMO has an opportunity to gather additional information directly from the company commanders. On the basis of the commander's guidance, the battalion executive officer and BMO can focus or redirect the battalion's maintenance efforts and resources.

Company. Each company establishes its command post at the first sergeant's M113. The commander and first sergeant are located in the CP with the maintenance team chief. CP personnel monitor the battalion command net, the administrative/logistical net, and the company's internal frequency. It is imperative that the maintenance M113, tool truck, toolboxes, parts manuals, and maintenance personnel be on the vehicle line.

While the soldiers are removing the tarps from the vehicles, opening engine compartments, and preparing to conduct PMCS, each company maintenance team chief conducts a maintenance class for leaders (usually Bradley commander and above) on a particular PMCS check, or a command highlighted problem that requires more focus and a better understanding of the operator's manual. As each crew approaches this highlighted check during the PMCS, the leader provides them with additional instruction from his maintenance class.

The flag system, similar to the draw yard at the National Training Center, is incorporated during AA operations. Red flags represent the gun system or turret; yellow flags, the communications system; and green flags, the hull. The flags are used to signal the company maintenance personnel that a particular PMCS has been completed and verification is required, or that a deadline item has been found and needs the maintenance team's assistance.

As the DA Forms 5988-E and 2404 are turned in to the maintenance team chief; the company executive officer and the team chief review them, order the required parts immediately, and redirect the mechanics, using priorities of work to make the best use of that limited resource.

With the battalion executive officer, company commanders, and BMO, the commander can assess the day's AA operations and base additional guidance on the results.

Along with the PMCS, each platoon turns in to the company CP the pre-fire checklist for each Bradley or combat system. This provides the status of the weapons, fire control, and other systems in each platoon, allows the master gunner to establish his maintenance priorities, and updates the commander on the unit's combat power. The commander can use this as part of his PCI to assess a crew's proficiency with its system and to train and evaluate his lieutenants. Maintaining the company CP enables the company commander to keep a running estimate and update the battalion commander at any time.

Platoon leaders and platoon sergeants are required to personally examine every deficiency on all of their tracks. Knowing their platoon ensures that they also know their running estimate. A company commander must likewise understand every deadline deficiency on every vehicle in the company, thus reinforcing that he knows his running estimate by knowing all of the company's deadlined equipment.

The company commander can run a number of additional training events in the assembly area. Among these events are Bradley gunnery skills testing, boresighting, leader training, tracking board, and gun manipulation. The dismount soldiers can also be used and trained instead of being sent back to the company to clean weapons. Based on the commander's priorities and guidance, new soldiers can be familiarized with the vehicles, prospective drivers can help maintain the vehicle, or a leader may conduct dismount drills. By having the unit concentrated in one area, a commander can maximize training and eliminate distractions.

The most important training precept is to train as we fight. Although the 3d Infantry Division is a force projection unit, we still experience resource restrictions, and we spend a significant amount of our time in a garrison environment. This means that much time is spent maintaining and sustaining the heavy force. This reality has driven us to internalize the reengineering strategy to make the most of the resources we have available.

Reengineering the old command maintenance day into AA operations focuses on preparing equipment and soldiers by bringing all systems to combat readiness. It emphasizes training that is METL-based, hands-on, multi-echeloned, and fully integrated. This type of training will provide focus and development for our future leaders. We cannot afford to waste the most precious of resources—time and soldiers.

Major Robert P. Cerjan commanded a Bradley company in the 2d Battalion, 7th Infantry, 3d Infantry Division, and is now a small-group instructor for the Infantry Officer Advanced Course. He was previously assigned to the 4th Battalion, 22d Infantry, 25th Infantry Division. He is a 1986 ROTC graduate of Norwich University.

A Light Infantry Company's
Defense of an Assembly Area

CAPTAIN BRIAN J. REED

During a rotation at the Joint Readiness Training Center (JRTC), the 2d Battalion, 27th Infantry, used the characteristics of the defense in planning an assembly area and ultimately defeated the enemy attacks.

As the fifth day of the battalion's search and attack operations was coming to a close, the platoons of Company A returned to the company assembly area to prepare for night operations.

Up until this point, the company's mission had been security oriented: convoy security, route clearance, and ambushes and patrols to provide security for the battalion tactical operations center (TOC), the combat trains, and the main supply route. The mission for this evening was to conduct a night movement to a new assembly area while leaving a platoon to conduct a "stay-behind" ambush.

The TOC, which had been approximately 300 meters west of the company's assembly area, relocated at dusk to its new position 2.5 kilometers to the east. The combat trains, however, were still in their original location 200 meters north of Company A, and the company was not to move until the trains had departed. Throughout the day, the TOC and the trains had been victims of constant enemy reconnaissance patrols and harassing mortar fires.

It soon became obvious that the enemy force had pinpointed the battalion command and control nodes and was intent on destroying them. What the enemy did not know was that the TOC had moved and a rifle company was firmly entrenched in an assembly area in the immediate vicinity. Over the next two hours, Company A fought two successive battles that repulsed the enemy, preserved the combat trains, and provided invaluable lessons on company assembly area operations.

Field Manual (FM) 7-10, *The Infantry Rifle Company*, states that the company commander plans for an assembly area as he does for a perimeter defense. It was with this thought in mind that we structured the defense of our company assembly area.

The mission was to conduct a night movement to a new assembly area while leaving a platoon to conduct a stay-behind ambush.

Preparation

To say the least, the preparation of the assembly area defense was critical. We could not do much preparation initially, because we occupied the position during limited visibility. The next day, however, we immediately conducted reconnaissance and security (R&S) patrols that identified key terrain, likely enemy infiltration routes into our position, and the potential weaknesses of our present position. Simultaneously, the rest of the company completed hasty fighting positions, sector sketches, and range cards.

On the basis of the information gathered by the R&S patrols, we were able to emplace observation posts, which eventually provided early warning and took the element of surprise away from the enemy. In addition, as company commander, I conducted our own intelligence preparation of the battlefield (IPB) analysis, which then allowed me to wargame friendly and enemy options with the platoon leaders and the fire support officer (FSO). This enabled us to plan for various contingencies and synchronize them in case we had to defend the assembly area.

Disruption

The best way for us to disrupt the attacker's synchronization in this case was through the use of indirect fires. It was in this area that the planning and eventual use of our organic 60mm mortars proved critical. Using these, along with the battalion's 81mm mortars and 105mm artillery, the FSO planned targets on likely enemy avenues of approach. He also planned targets to our flanks, front, and rear and on top of our position to stop any likely

enemy penetrations or counterattacks and to cover our withdrawal, if necessary. We planned a 60mm mortar final protective fire (FPF), because this was the only indirect fire system we had at our disposal during the preparation phase. As it turned out, it was this FPF that helped us restore our perimeter.

We planned for indirect fires using systems for which we did not have priority at the time of occupation. The priority of fires for the 81mm mortars and the 105mm artillery was designated to other companies, but these systems were not in use at the time of the actual fight. Additionally, we registered our 60mm mortars during the preparation phase, which increased the accuracy of these fires. We also confirmed the locations of all indirect fire targets using our global positioning systems, further improving accuracy.

Ultimately—at a time when the enemy was dangerously close to penetrating our position—our indirect fires disrupted his synchronization and caused him to withdraw and consolidate.

Concentration

FM 7-10 says that if the defender is to succeed, he must concentrate combat power at the decisive time and place. For us, this started with the direct fire plan and then incorporated the indirect fire plan. To guarantee success, a commander needs to plan properly for the total synchronization of the combat power provided by both direct and indirect fires. We accomplished this by using the company direct fire plan sketch to devise the indirect fire plan.

We planned for indirect fires using systems for which we did not have priority at the time of occupation.

After the platoon leaders completed their sector sketches, the executive officer consolidated them into a single sketch, which became the company direct fire plan. This plan increased the effects of the weapons on the enemy and ensured that all key weapon systems achieved mutual support. The company sketch, combined with the IPB, was used to come up with the indirect fire targets. The targets were placed where they could best complement the direct fire plan and cover dead space. It was a thorough preparation of the defense that made this possible.

The positioning of the M60 machineguns was particularly critical. FM 7-10 goes on to state that combat power focuses on effects, not just the number of soldiers or weapons. It mentions that the defender must economize in some areas, retain a reserve, and maneuver to gain local superiority. Because of our own IPB and wargaming, we knew where we could accept risk in the assembly area and maneuver a force, if necessary, to counterattack or reinforce another platoon. During the preparation phase, I gave one platoon such a mission. The platoon leaders and I had talked about this possibility, but we had not rehearsed it. Fortunately, this mission was well executed, even though we almost missed an opportunity to gain local superiority by failing to rehearse.

Flexibility

If there was any one area I could highlight as the key to our success, it would be flexibility. Four areas contributed to that flexibility:

Mutual support. After analyzing the terrain and wargaming enemy and friendly courses of action, we decided the best way to maintain mutual support between the platoons was to tie them in with one another. The platoons were not in separate battle positions or strongpoints. We were able to maintain an interval of 10 to 15 meters between fighting positions and were tied-in for 360 degrees. Maneuvering an element to gain local superiority enabled us to reestablish our defense and repel the enemy counterattack as well.

Reporting. Timely and accurate reports enabled us to exercise the various assets at our disposal and to paint an accurate picture of the situation for the battalion commander. As a result, he ultimately allocated the battalion indirect fire assets to us.

Handheld mortars. As the situation developed, it became apparent that the 60mm mortars would be more effective in the handheld mode than in their current firing position. At this point, the battle had developed into a close fight, and the mortars quickly displaced to pre-designated positions where they proved effective.

Junior leader initiative. As the battle developed, the platoon leaders and sergeants, squad leaders, and team leaders demonstrated outstanding initiative. They shifted weapon systems and personnel as the situation changed. This agility allowed us to counter the enemy's attack and then strike back.

Our indirect fires disrupted the enemy's synchronization and caused him to withdraw and consolidate at a time when he was close to penetrating our position.

The final piece of the fight was the reorganization of the company after the battle. Numerous tasks had to be done—casualty evacuation, search of enemy casualties, evacuation of enemy prisoners, resupply of ammunition, and reestablishment of the defense. The use of combat lifesavers and well-rehearsed special teams made the process easier. The first sergeant and company executive officer were the key players during this phase of the operation.

This battle taught us some invaluable lessons. By using the characteristics of the defense when planning an assembly area, any company commander will be better prepared to defend his position and remain ready for future operations.

Captain Brian J. Reed commanded companies in the 2d Battalion, 27th Infantry, and the 4th Battalion, 87th Infantry, 25th Infantry Division. He previously served in the 2d Battalion, 6th Infantry, 3d Infantry Division. He is now a graduate student at the University of Maryland, preparing for an instructor assignment at the United States Military Academy.

Task of the Quarter
Improving Training Strategy

CAPTAIN JEFFREY L. PETERS

We have all seen commanders try to pass off questionable training schedules during battalion or brigade training meetings. When the higher commander asks, "Why are you doing this?" the right answer would be, "A recent assessment shows that our unit needs improvement in that area."

More often than not, however, the reviewing commander sees similar training events submitted and resubmitted, week after week. He knows the unit is having a breakdown in its training strategy for improvement. At company level, looking for events to put on the training schedule is a chore if the unit is not assessing and planning for improvement.

But at this level, developing a training strategy is not that hard. All it involves is thinking and planning by the unit commander and subordinate leaders. The first thing that should be done is a METL (mission essential task list) assessment. The METL is basically those tasks that are essential to the wartime mission. Any unit that doesn't have a METL should develop one, with the help of the unit's training officer or S-3.

To assess a unit METL, the commander should see his unit performing the tasks outlined in it. These should include both collective and individual tasks. A training scenario should simulate unit involvement in a multi-echelon task. As the unit performs the tasks set forth in the scenario, the unit commander compares or grades the unit, using the T-P-U system. If the unit is trained at the task, it is given a T (for trained); if only partially trained, a P (for needs practice); if the task is totally new to the unit or it performs poorly, it should be given a U (for untrained).

From these ratings, the commander can then plot the training strategy for the upcoming quarter or year. The general goal is to improve the unit's METL proficiency until it receives all Ts and then to maintain that rating. But METL improvement takes time. While the individual tasks that make up the more complex collective and multi-echelon tasks can be trained and assessed almost daily at unit level, most collective tasks must be trained and assessed during large unit training events.

At the weekly training meetings, the battery or company commander presents the newly assessed METL to the subordinate leaders. Together, they select the unit's training strategy for improvement, with all levels of the leadership taking responsibility for the unit's success.

The first tasks to be addressed for improvement should be any untrained (U) tasks, which show the weakest link in the current training strategy. Untrained METL tasks are then broken down to the platoon, squad, and individual segments of the collective task. These individual and squad sub-tasks can then be placed on the next few training schedules—T-6, T-7 (training weeks). If the task is totally new to a unit, or the unit is in desperate need of improvement, the commander can request permission to change the upcoming published training schedules. This is advisable only when the unit changes commanders or a real problem exists. The weak task is eventually trained, assessed, and hopefully upgraded to a P or a T on the company METL.

Since the subordinate units' company METLs affect the overall battalion or brigade METL, the higher commanders may have a way to influence the total picture and bring success for the whole unit.

As the battalion commander sees the assessment results of the entire unit, let's say after an ARTEP, one or more collective tasks may need improvement. More than likely, each subordinate unit needs improvement in the tasks found untrained or partially trained. The commander can then start to plan for the

SAMPLE BATTALION METL ASSESSMENT

TASK	TRAINED (RUN)	PARTIALLY TRAINED (WALK)	UNTRAINED (CRAWL)
PERFORM STRATEGIC DEPLOYMENT			U
SUSTAINMENT OPERATIONS		P	
MANEUVER OFFENSIVELY	T		
DEFEND POSITION		P	
SURVIVABILITY OPERATIONS		P	

Table 1

SAMPLE TASK OF THE QUARTER	
TASK	**QUARTER OF EMPHASIS**
PERFORM STRATEGIC DEPLOYMENT	1st QTR FY 95
SUSTAINMENT OPERATIONS	2d QTR FY 95
MANEUVER OFFENSIVELY	3d QTR FY 95
DEFEND POSITIONS	4th QTR FY 95
SURVIVABILITY OPERATIONS	1st QTR FY 96

Table 2

SAMPLE TASK OF THE MONTH—COMPANY LEVEL	
TASK	**MONTH OF EMPHASIS**
CONVOY OPERATIONS	OCTOBER
RAIL LOAD EQUIPMENT	NOVEMBER
AIR LOAD EQUIPMENT/PERSONNEL	DECEMBER
COMPANY SUPPLY OPERATIONS	JANUARY
COMPANY MAINTENANCE OPERATIONS	FEBRUARY
AMBUSH OPERATIONS	MARCH
ENGAGEMENT OPERATIONS	APRIL
COMPANY DEFENSIVE OPERATIONS	MAY
DEFEND AGAINST AIR ATTACK	JUNE
NBC OPERATIONS	JULY
FIRE AND BOMB TEAM OPERATIONS	AUGUST

Table 3

improvement of the entire unit in these tasks.

One way to do this is to assign each of the deficient tasks a time period for emphasis and improvement. Depending on the size of the unit and the available resources, one task per training quarter should be enough. Assigning too many tasks in short time will only lead the subordinate units to perform most of them in an unimpressive manner. If the unit concentrates personnel, resources, and time on the improvement of one collective METL task per quarter, in a couple of years, the entire unit will improve.

An additional benefit to all this planning would be that each subordinate commander and his personnel would know the complete training plan and direction for the battalion or brigade. It would work like this: Each quarter a task from the METL would be chosen for improvement. The battalion METL tasks are made up of many collective tasks that can be trained at the company level. It is only when the battalion is conducting multi-echelon, collective training that the whole task can be assessed. The battalion or brigade commander issues the training guidance for the quarter and tells the units the Task of the Quarter. The units are then able to focus personnel and time on the improvement of the sub-tasks at company, platoon, squad, and individual levels.

Doing this will help the entire unit know what the overall training plan or strategy is, and will help guide the subordinate units in planning training schedules. What the subordinate units put on their training schedules will more closely reflect the overall strategy of the whole unit.

This Task of the Quarter strategy is not meant to take over all training for the quarter but to act as a focus. Training will still need to be done on the tasks on which the unit is proficient, to maintain the high state of proficiency and until the next assessment. The proficiency training is done at a much higher intensity to maintain the unit at or near ARTEP standards.

A training strategy of this type allows a unit to improve upon the tasks that need improvement and provides time for day-to-day activities and command taskings. To do this, the battalion allots its staff, time, and resources to the Task of the Quarter. Using a Crawl, Walk, Run method, the battalion training staff can advise the subordinate units on the appropriate company or platoon level tasks to start on. The battalion training officer, along with the company commander, can assess the unit's proficiency in the company and platoon tasks that make up the battalion task. The battalion training officer acts as part of a checks and balances system. If the unit tries to train collective tasks not at its level of competency, the battalion training officer will then guide the company commander to more suitable tasks.

This guidance is not meant to interfere with the company commander's ability to plan and conduct training for the unit. It enables the battalion training officer to use experience and the battalion's strategy to ensure that the company is not off-track, wasting time and resources in achieving its goal. The training officer should also ensure that the unit's training attitude is correct. Often, subordinate units train to "just train," and don't educate the soldiers involved on how the task they are training relates to their combat mission. A new or concerned company commander will welcome the advice of an experienced S-3 training officer. He must use the battalion staff to make his command successful and add to the success of the battalion as a whole.

The accompanying charts show a sample battalion METL and the way it relates to the company, platoon, and individual tasks. The charts show how Task of the Quarter programs would work.

Captain Jeffrey L. Peters, an Air Defense Artillery officer, served as a battery commander and S-3 in the 3d battalion, 4th, 82d Airborne Division, and was executive officer of a Patriot battery during Operation *Desert Storm*. He is now assigned to COSCOM at Fort Bragg. He is a 1989 graduate of the Officer Candidate School and a 1986 graduate of Iowa State University.

Water Resupply in the Light Infantry

CAPTAIN WILLIAM M. CONNOR, JR.

One of the most difficult logistical missions in light infantry is water resupply. These soldiers must have water to survive, but they must also carry what they drink. In cool weather, six quarts will last 24 hours. In hot weather, soldiers will drink more than eight quarts in 24 hours, which means they will have to be resupplied every 12 hours. From a battalion S-4's perspective, the difficulty is in making sure water gets to every soldier in a usable package.

When I was a battalion S-4 in the 2d Battalion, 27th Infantry, during a rotation at the Joint Readiness Training Center and all of the training for it, I learned a lot about water resupply.

There are various ways to resupply water in light infantry: One way is to deliver water cans to line companies with the logistical package (LOGPAC). The problem with this method is that the platoons and squads are usually spread out and performing missions. There is not time enough to distribute five-gallon cans and collect the empty cans during the short LOGPAC window. Soldiers have to carry them around until the next LOGPAC. Supply sergeants have to bring along at least 80 water cans so they can keep 40 with the company between LOGPACs (not counting cans that will be lost).

A second method is to use 50-gallon blivets during LOGPAC. But it is unrealistic for a company to use them, because all its soldiers must be brought to one location to fill their canteens.

The solution we came up with was to use six-gallon plastic milk containers, the milk bags used in the mess hall. We bought them empty from a milk company. More than 1,000 bags cost less than $800 in Hawaii and should be even less expensive in other areas. The 1,000 bags, which came with a sealed white tube attached, took up the space of a footlocker. To fill a bag with water, a soldier pops the tube off, puts water in, and replaces the tube. To fill a canteen from the bag, he cuts the end of the tube and water streams into the canteen.

We used the water bags for the first time during a brigade field training exercise. The one problem we had to solve was carrying the bags once they were filled. If they were not packaged, they were difficult to carry around and load. We wanted a package that was already part of the supply system and one that could be thrown away.

MRE (meals, ready to eat) boxes fit both of these needs. The support platoon put the MREs in trash bags in the brigade support area before bringing them out at LOGPAC, and then they put the full water bags in the MRE boxes. This worked very well. The boxes are easier to load and are intended to be thrown away when they're empty. When the LOGPAC was delivered, all the supply sergeant had to do was kick out the MRE boxes and the trash bags, which reduced our LOGPAC time.

Once the soldiers had been resupplied, they were able to treat everything delivered at LOGPAC like trash. They left it for pick-up and moved out.

There are some other benefits to water-bag resupply. The bag's two-ply plastic will not burst unless it is punctured by a sharp object, and it can be reused. A soldier can put any amount he wants in the bag and carry it in his rucksack like a five-quart blivet.

When the bags are in MRE boxes, they can easily be slingloaded. They can also be stacked inside aircraft. (We conducted five battalion air assaults in preparing for and conducting our JRTC rotation. We slingloaded or stacked water boxes with almost every air assault.) The same is not true of water blivets or cans. With water-bag resupply, it is easier to preposition or cache water. When prepositioning cans or blivets, there is always a concern that they will be left behind. With the water bags (at less than 80 cents each), there is no worry about leaving them behind. A unit can preposition bags in two different sites, knowing that only one of them will be used.

My recommendation is that the Army make water-bag resupply the standard for light units. If water bags were made to fit light infantry unit specifications, the resupply process would be easier for everyone and also save money. Anyone who has been to the JRTC knows that many water cans are lost or left behind in the boxes. During unit training, it's the same story. Water bags cost far less and can be reused if necessary, and soldiers can carry empty bags around if they have to. Another saving, both in dollars and in unit effectiveness, is in heat casualties, most of which occur because individual soldiers do not have access to enough water.

Water-bag resupply is the cheapest, most efficient way of getting water to the people who need it most—the light infantrymen at company level.

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INFANTRY CAREER NOTES

PROFESSIONAL BLUEPRINTS FOR SUCCESSFUL INFANTRYMEN

Professional Blueprints for Successful Infantrymen have been developed to provide a frame of reference that allows for more planning and predictability in the lives of Infantrymen and their families.

These blueprints supplement the NCO Career Development Map for Career Management Field (CMF) 11. The map, a generic guide for the entire CMF, does not contain the specific information needed for the Infantry military occupational specialties (MOSs): Infantryman (11B), Indirect Fire Infantryman (11C), Heavy Antiarmor Weapons Infantryman (11H), and Fighting Vehicle Infantryman (11M). Soldiers are encouraged to copy and use the tables included here. Leaders should also use them in developing and managing their Infantrymen.

The blueprint for each MOS helps the Infantryman better plan his military career by showing the critical gates he must pass through to be occupationally fit to assume more responsibility.

Each professional blueprint is divided into seven major subject areas:

Institutional Pillar. This area shows the level of schooling from the Noncommissioned Officer Educational System. It includes both the progressive and the functional education an Infantryman needs throughout his career.

Operational Pillar. This area points out the leadership positions that are essential to an Infantryman's advancement. Critical warfighting assignments (with footnote reference 1) identify the demanding leadership positions needed.

Special Assignments or Functional Requirements. Note that this section begins with the staff sergeant, and that the remarks at the bottom of the sheet show the operational assignments the NCO should complete before any special assignments.

Institutional and Special Skills. This block provides the foundation for leadership development that will improve the everyday performance of today's Infantryman. The institutional critical task list outlines the technical and tactical knowledge an Infantryman needs upon graduation from a particular school to perform his duties, missions, and responsibilities. The existing promotion system states: *Select for Promotion-Train-Promote, and Utilize*. The initial position utilization for all Infantry after being trained is in a warfighting unit. It is imperative that the Infantryman apply what he has learned at the institutional base to his operational position.

Recommended Time in Warfighter Assignment. This section reflects the optimum time needed in the critical warfighting leadership positions listed in the Operational Pillar section. These occupational positions are crucial in providing leaders with the experience and opportunity to assess their ability to apply theoretical knowledge in a practical setting, as well as determining their potential for further development as leaders.

Promotion. This section is a quick and ready reference, showing when the leader or soldier can expect to be considered for promotion.

Retention Control Points. These blocks show exactly when a soldier must separate from the Army if not selected for further promotion.

The Infantry senior support channel throughout the Army provided input to these blueprints, adding expertise in all Infantry MOSs. The blueprints embody the eight personnel life-cycle management functions found in Army Regulation 600-3, *The Army Personnel Proponent System*:

Structure:

- Analyze and recommend changes to TAADS/TOEs/TDAs.
- Establish career progression patterns in the operational pillar assignments by MOS.

Acquisition:

- Recommend or determine appropriate accession criteria for content and quality distribution.
- Develop and review recruiting materials that affect the entry level of the institutional pillar.

Individual Training and Education:

- Identify institutional and special skill training criteria by MOS.
- Ensure that job analysis is conducted to identify required knowledge and skills by grade.
- Recommend criteria for selecting individuals to attend education and training in the institutional pillar.

Distribution:

- Evaluate inventory and recommend adjustments to support authorizations and force structure changes.
- Determine number of personnel available for training.
- Recommend changes to Army policy relating to time in warfighter assignments, details, special assignments, and functional requirements.

Deployment:

- Evaluate unit distribution, home basing concept, deployment, and other key actions related to regimental affiliation and the Unit Manning System.
- Provide recommendations on civilian mobilization planning and management.

Sustainment:

- Represent the professional interest of members.
- Foster a positive attitude toward personnel systems, promotion system, and programs.

Professional Development:

- Identify opportunities for development through institutional and special skill training, operational pillar assignments, and self-development.
- Establish career progression patterns in the operational pillar assignments, special assignments, and functional requirements.
- Link professional development to leader development in the institutional and operational pillars.

Separation:

- Recommend selected shortage fields as an exception to separation policy.
- Recommend minimum qualification standards.
- Recommend changes to, and analyze impact of, retirement, retention control point, force reduction, and service obligation policies and proposals.

To achieve success, Infantrymen need these professional blueprints to help define their duties and the requirements for positions of greater responsibility in today's Army. Each centralized senior NCO promotion panel receives guidance on the board selection criteria outlined from these charts.

The blueprints help answer questions about what the Infantry is looking for in its future NCOs. They offer greater degrees of predictability and probability to our soldiers and their families and sustain our Army with high-quality Infantrymen. Finally, the professional blueprints create an atmosphere that encourages every Infantry soldier to be all he can be.

(Written by Command Sergeant Major Mack H. Vereen, Command Sergeant Major of the U.S. Army Infantry Center.)

Professional Blueprint for a Successful Infantryman (11B)

RANK	PVT-PFC	SPC/CPL	SGT	SSG	SFC	MSG/1SG	SGM/CSM
Institutional Pillar	OSUT/AIT	PLDC	BNCOC	ANCOC		SGM Academy	
Operational Pillar	Rifleman RTO Asst Antiarmor Asst Machine Gunner	SAW/M60/ M240B Gnr Grenadier Antiarmor Spc Team Ldr	[1]Team Ldr Squad Ldr	[1]Squad Ldr Platoon Sgt	[1]Platoon Sgt Asst Ops Sgt	[1]1SG Ops Sgt Intel Sgt	11Z Operations Sgt 00Z Bn/Bde/Div
Special Assignments or Priority One Positions				Drill Sergeant Recruiter O/C [2]Instructor AC/RC Advisor	Drill Sergeant Recruiter O/C [2]Instructor AC/RC Advisor ROTC	O/C [2]Instructor AC/RC Advisor ROTC	11Z AC/RC ROTC 00Z School Cmdt Training Bn,Bde
Institutional and Special Skills	Airborne Air Assault Sniper Javelin Dragon	Ranger Airborne Air Assault Sniper Javelin Dragon	[3]Ranger Airborne Air Assault Sniper Jumpmaster	Ranger Airborne Air Assault Pathfinder Jumpmaster Battle Staff	Ranger Airborne Air Assault Pathfinder Jumpmaster Battle Staff Air Tactical Ops	Ranger Battle Staff 1SG Course	Ranger Battle Staff
	Expert Infantryman Badge						
Recommended Time in Warfighter Assignment	All	All	All at Plt Level	24 months as Squad Ldr	24 months as Platoon Sgt	24 months as First Sergeant	
Promotion	6 months-PV2 12 months-PFC	26 months	PZ-36 months SZ-18 months	PZ-84 months SZ-48 months	PZ-SZ announced byDA before each board	PZ-SZ announced by DA before each board	PZ-SZ announced by DA before each board
Retention Control Point	3 Years TIS	SPC/SPC(P) 10 Years TIS	SGT/SGT(P) 15 Years TIS	SSG 20 Years TIS SSG(P) 22 Years TIS	SFC 22 Years TIS SFC(P) 24 Years TIS	MSG 24 Years TIS MSG(P) 30 Years TIS	SGM/CSM 30 Years TIS [4]CSM 35

[1]Critical assignments/operational pillar assignment prior to any special assignments.
– NCOs assigned to CTCs as O/C and OPFOR must have served successfully as squad leader, platoon sergeant, or first sergeant in TOE Infantry battalion.
– Infantrymen should continue to strive for the Expert Infantryman Badge (PVT through MSG/1SG).
[2]Priority one instructor positions are career enhancing; currently, all instructor positions are priority one.
[3]With consolidation of BNCOC at Fort Benning, Ranger Course is highly recommended before soldier returns to unit.
– Upon completion of the Battle Staff Course, operations sergeant should remain in the operations position for a minimum of 12 months.
[4]If serving in a nominative position where commander is a LTG or GEN.

This document will be updated as changes are made in structure and management requirements.

Professional Blueprint for a Successful Indirect Fire Infantryman (11C)

RANK	PVT-PFC	SPC/CPL	SGT	SSG	SFC	MSG/1SG	SGM/CSM
Institutional Pillar	OSUT/AIT	PLDC	BNCOC	ANCOC		SGM Academy	
Operational Pillar	Asst Gnr Loader RTO	Carrier Driver Gunner	[1]Squad Ldr FDC Section Ldr	[1]Squad Ldr [1]Section Ldr Platoon Sgt FDC Chief	[1]Platoon Sgt [1]Section Ldr	[1]1SG [1]Platoon Sgt	11Z Operations Sgt 00Z Bn/Bde/Div
Special Assignments or Priority One Positions				Drill Sergeant Recruiter O/C [2]Instructor AC/RC Advisor	Drill Sergeant Recruiter O/C [2]Instructor AC/RC Advisor ROTC	O/C [2]Instructor AC/RC Advisor ROTC	11Z AC/RC ROTC 00Z School Cmdt Training Bn,Bde
Institutional and Special Skills	Airborne Air Assault	Ranger Airborne Air Assault	[3]Ranger Airborne Air Assault Jumpmaster	Ranger Airborne Air Assault Jumpmaster Pathfinder IMLC	Ranger Battle Staff Airborne Air Assault Jumpmaster Pathfinder O/C	Ranger Battle Staff IMLC 1SG Course	Ranger Battle Staff IMLC
	Expert Infantryman Badge						
Recommended Time in Warfighter Assignment	All	All	All at Plt Level	24 months as Squad Ldr Section Ldr	24 months as Platoon Sgt Section Ldr	24 months as First Sergeant Platoon Sgt	
Promotion	6 months-PV2 12 months-PFC	26 months	PZ-36 months SZ-18 months	PZ-84 months SZ-48 months	PZ-SZ announced byDA before each board	PZ-SZ Announced by DA before each board	PZ-SZ announced by DA before each board
Retention Control Point	3 Years TIS	SPC/SPC(P) 10 Years TIS	SGT/SGT(P) 15 Years TIS	SSG 20 Years TIS SSG(P) 22 Years TIS	SFC 22 Years TIS SFC(P) 24 Years TIS	MSG 24 Years TIS MSG(P) 30 Years TIS	SGM/CSM 30 Years TIS [4]CSM 35

[1]Critical assignments/operational pillar assignment prior to any special assignments
– NCOs assigned to CTCs as O/C and OPFOR must have served successfully as squad leader, platoon sergeant, or first sergeant in TOE Infantry battalion.
– Infantrymen should continue to strive for the Expert Infantryman Badge (PVT through MSG/1SG).
[2]Priority one instructor positions are career enhancing; currently, all instructor positions are priority one
[3]With consolidation of BNCOC at Fort Benning, Ranger Course is highly recommended before soldier returns to unit.
– Upon completion of the Battle Staff Course, the operations sergeant should remain in the operations position for a minimum of 12 months.
[4]If serving in a nominative position where commander is a LTG or GEN

This document will be updated as changes are made in structure and management requirements

Professional Blueprint for a Successful Heavy Antiarmor Weapons Infantryman (11H)

RANK	PVT-PFC	SPC/CPL	SGT	SSG	SFC	MSG/1SG	SGM/CSM
Institutional Pillar	OSUT/AIT	PLDC	BNCOC	ANCOC		SGM Academy	
Operational Pillar	Asst. Gunner Driver RTO	Driver Gunner Squad Ldr	[1]Squad Ldr Section Ldr Gunner	[1]Section Ldr Platoon Sgt	[1]Platoon Sgt Asst Ops Sgt	[1]1SG Ops Sgt Intel Sgt	11Z Battle Staff NCO 00Z Bn/Bde/Div
Special Assignments or Priority One Positions				Drill Sergeant Recruiter O/C [2]Instructor AC/RC Advisor	Drill Sergeant Recruiter O/C [2]Instructor AC/RC Advisor ROTC	O/C [2]Instructor AC/RC Advisor ROTC	11Z AC/RC ROTC 00Z School Cmdt Training Bn,Bde
Institutional and Special Skills	Airborne Air Assault	[3]Ranger Airborne Air Assault	Ranger Airborne Air Assault Jumpmaster	Ranger Airborne Air Assault Jumpmaster	Ranger Airborne Pathfinder Battle Staff	Ranger Battle Staff 1SG Course	Ranger Battle Staff
	Expert Infantryman Badge						
Recommended Time in Warfighter Assignment	All	All	All at Plt Level	24 months as Squad Ldr	24 months as Platoon Sgt	24 months as First Sergeant	
Promotion	6 months-PV2 12 months-PFC	26 months	PZ-36 months SZ-18 months	PZ-84 months SZ-48 months	PZ-SZ announced by DA before each board	PZ-SZ announced by DA before each board	PZ-SZ announced by DA before each board
Retention Control Point	3 Years TIS	SPC/SPC(P) 10 Years TIS	SGT/SGT(P) 15 Years TIS	SSG 20 Years TIS SSG(P) 22 Years TIS	SFC 22 Years TIS SFC(P) 24 Years TIS	MSG 24 Years TIS MSG(P) 30 Years TIS	SGM/CSM 30 Years TIS [4]CSM 35

[1]Critical assignments/Operational pillar assignment prior to any special assignments.
– NCOs assigned to CTCs as O/C and OPFOR must have served successfully as squad leader, platoon sergeant, or first sergeant in TOE Infantry battalion.
– Infantrymen shuold continue to strive for the Expert Infantryman Badge (PVT through MSG/1SG).
– Ranger Course completion for 11H is considered a plus but not required for progression.
[2]Priority one instructor positions are career enhancing; currently, all instructor positions are priority one.
[3]With the consolidation of BNCOC at Fort Benning, it is highly recommended that soldiers complete the Ranger Course before returning to unit.
– Upon completion of the Battle Staff Course, the operations sergeant should remain in the operations position for a minimum of 12 months.
[4]If serving in a nominative position where commander is a LTG or GEN.

This document will be updated as changes are made in structure and management requirements.

Professional Blueprint for a Successful Fighting Vehicle Infantryman (11M)

RANK	PVT-PFC	SPC/CPL	SGT	SSG	SFC	MSG/1SG	SGM/CSM
Institutional Pillar	OSUT/AIT	PLDC	BNCOC	ANCOC		SGM Academy	
Operational Pillar	Grenadier Antiarmor Spc Rifleman RTO	Machine Gnr SAW Gnr BFV Driver BFV Gunner Team Ldr	[1]Team Ldr [1]BFV Sr Gunner Squad Ldr	[1]Squad Ldr [1]Section Ldr Co Master Gnr Platoon Sgt	[1]Platoon Sgt Bn Mastr Gnr Asst Ops Sgt	[1]1SG Ops Sgt Intel Sgt	11Z Operations Sgt 00Z Bn/Bde/Div
Special Assignments or Priority One Positions				Drill Sergeant Recruiter [2]O/C [3]Instructor AC/RC Advisor	Drill Sergeant Recruiter [2]O/C [3]Instructor AC/RC Advisor ROTC	[2]O/C [3]Instructor AC/RC Advisor ROTC	11Z AC/RC ROTC 00Z School Cmdt Training Bn,Bde
Institutional and Special Skills	Sniper Javelin Dragon	Sniper Javelin Dragon	[4]Ranger Sniper [5]Master Gnr Air Assault	Ranger [5]Master Gnr Pathfinder Battle Staff	Ranger [5]Master Gnr Pathfinder Battle Staff	Ranger Battle Staff 1SG Course	Ranger Battle Staff
	Expert Infantryman Badge						
Recommended Time in Warfighter Assignment	All	All	All at Plt Level	24 months as Squad Ldr Section Ldr	24 months as Platoon Sgt	24 months as First Sergeant	
Promotion	6 months-PV2 12 months-PFC	26 months	PZ-36 months SZ-18 months	PZ-84 months SZ-48 months	PZ-SZ announced by DA before each board	PZ-SZ announced by DA before each board	PZ-SZ announced by DA before each board
Retention Control Point	3 Years TIS	SPC/SPC(P) 10 Years TIS	SGT/SGT(P) 15 Years TIS	SSG 20 Years TIS SSG(P) 22 Years TIS	SFC 22 Years TIS SFC(P) 24 Years TIS	MSG 24 Years TIS MSG(P) 30 Years TIS	SGM/CSM 30 Years TIS [6]CSM 35

[1]Critical assignments/Operational pillar assignment prior to any special assignments.
[2]Available to qualified Master Gunner.
– NCOs assigned to CTCs as O/C and OPFOR must have served successfully as squad leader, platoon sergeant, or first sergeant in TOE Infantry battalion.
– Infantrymen should continue to strive for the Expert Infantryman Badge (PVT through MSG/1SG).
[3]Priority one instructor positions are career enhancing; currently, all instructor positions are priority one.
[4]With consolidation of BNCOC at Fort Benning, it is highly recommended that soldiers complete the Ranger Course before returning to units.
– Upon completion of the Battle Staff Course, the operations sergeant should stay in the operations position for a minimum of 12 months.
[5]Available to SGT(P) and higher.
[6]If serving in a nominative position where commander is a LTG or GEN.

This document will be updated as changes are made in structure and management requirements.

BOOK REVIEWS

Winning and Losing in the Civil War: Essays and Stories. **By Albert Castel. University of South Carolina Press, 1996. 216 Pages. $29.95.**

Leadership and Command in the American Civil War. **Edited by Steven E. Woodworth. Savas Woodburg Publishers (1475 S. Bascom Ave., Suite 204, Campbell, CA 95008), 1996. 248 Pages. $24.95.** Reviewed by Dr. Charles E. White, Infantry Branch Historian.

After 132 years, the Civil War remains the most fascinating subject in American history. And it is books like these two that continue to make it such an interesting field of study.

In *Winning and Losing in the Civil War: Essays and Stories*, Albert Castel looks back 40 years and reflects on his role as a historian and the state of Civil War scholarship in general. Castel is one of our finest Civil War historians, winner of the 1992 Lincoln Prize for *Decision in the West*, a challenging study of the 1864 Atlanta Campaign. In this collection of essays, Castel reexamines his own writings on the Civil War, as well as the reasons Americans continue to rehash, reenact, and reassess that war. He also provides some excellent advice on the future of Civil War studies, particularly for those who feel that nothing new or original can be said of the epic story of the American people.

Castel's book contains 14 essays and stories grouped into four parts headed: The Probable versus the Inevitable, Setting the Record Straight, How the Civil War Was Fought, and Of Women and War. All but two of these writings have appeared in print before, but this does not detract from the quality of the book. Indeed, many of them are difficult to obtain in their original form, and Castel's reevaluation of his previous works clearly adds another dimension to his scholarship. As he writes in his preface and acknowledgments, these essays and stories "represent most of the best that I have been able to do during four decades of writing articles about America's favorite war."

His discerning eye seems to miss nothing, and his incisive mind addresses virtually every aspect of Civil War history, including many of the "might-have-beens" that have captivated both scholars and buffs for decades. Additionally, within each chapter is a bibliography of Civil War and U.S. historiography that demonstrates the breadth and depth of the author.

Castel is certainly not timid toward his subjects. He asks some challenging questions and presents some interesting answers. For example, was Dr. Mary E. Walker—the first and only woman awarded the Congressional Medal of Honor—a Samaritan or a charlatan? Were Quantrill's men "Bushwhackers" or legitimate partisans? Was there really a "massacre" at Fort Pillow? In other articles, Castel defends the honor and reputation of Robert E. Lee, discusses *Gone With the Wind* as history, details the amorous adventures of a Union officer during the Civil War, and analyzes the way the war was actually fought on the battlefield.

For anyone seeking to understand the complexity of America's greatest tragedy, *Winning and Losing in the Civil War* offers some fresh perspectives, some compelling arguments, and some forceful conclusions. You may not agree with all of the author's conclusions, but you will not be disappointed.

Another superb work that re-examines traditional Civil War topics is Steven E. *Woodworth's Leadership and Command in the American Civil War.* Of all the Civil War topics, generalship certainly has been studied the most. Yet this book clearly demonstrates why numerous subjects and personalities from the Civil War still await original study and thoughtful contemplation. And this book provides those fresh interpretations as Castel suggested in his book.

Woodworth has compiled five magnificent essays that provide a refreshing and provocative perspective on Civil War generalship. Richard M. McMurray's "Ole Joe in Virginia," helps the reader understand why Jefferson Davis (and others in the Confederate government) had little confidence or trust in General Joseph E. Johnston. Johnston was truly unfit for high command, and his life-long envy (bordering on hatred) of Robert E. Lee only served to hinder the Confederate war effort.

George E. Pickett was another general unfit for command. In her superb treatise "The Seeds of Disaster," Lesley J. Gordon completely shatters the flamboyant Pickett. One wonders how he was ever entrusted with command in the first place. The answer, of course, is the Virginia aristocracy and the grip it held on appointments within the Army of Northern Virginia. Unfortunately, as Gordon points out, Pickett was "a disaster looking for a place to hit."

The other three papers in this book examine Longstreet and Bragg at Chattanooga, Sumner at Antietam, and P.G.T. Beauregard during the Bermuda Hundred campaign. All three are equally original and interesting. And the delightful essay titles give the reader a clue to the content: For example, "On Smaller Fields" is Woodworth's study of Beauregard, who was a disaster as a theater commander in the West. Davis, thinking that Beauregard might perform better "on smaller fields," entrusted him with command during the Bermuda Hundred campaign. But as Woodworth concludes, Beauregard's behavior during this campaign was consistent with his performance in the West. "His talents and failings were as they had been since his arrival on the Manassas line some three years before."

Leadership and Command is one of the most important books recently published on the American Civil War. It is a compelling look at generalship and a fine reassessment of Civil War leadership. Many myths regarding Southern generalship are exposed, and many halos removed, in this fine study.

War Comes to Alaska: The Dutch Harbor Attack, June 3-4, 1942. **By Norman E. Rourke. White Mane Publishing Company (P.O. Box 152, Shippensburg, PA 17257), 1997. 166 Pages. $12.95.** Reviewed by Colonel Christopher B. Timmers, U.S. Army, Retired.

This brief but very readable work sheds light on a little-known campaign of World War II. Operation *AL*, the Japanese code name for the Aleutian campaign, does not command the attention of a Stalingrad, a Midway, or a Coral Sea (nor should it). But the attack on Dutch Harbor and the subsequent occupation of the island of Attu for almost 14 months represented the first time U.S. soil had been seized by an aggressor

since the Civil War. Further, Washington did its best to suppress news of the action in the Aleutians for fear that even a tenuous Japanese toehold on U.S. territory so early in the war, could spread panic among the American people.

Despite the success of the surprise attack in December 1941, five first-class aircraft carriers (not at Pearl Harbor that day) had escaped destruction. Japanese Admiral Yamamoto, an early advocate of military aviation, was acutely aware that if he was to control the Pacific theater, the remnants of the U.S. fleet, together with these aircraft carriers, would have to be drawn into open battle and destroyed. He chose for his battlefield the vicinity of Midway, an atoll in the north Pacific with an area of barely two square miles. An attack on the Aleutians would be launched with the goal of diverting at least some of the U.S. aircraft carriers from the main battle farther south.

Yamamoto felt the pressure of time in this endeavor. He claimed that if the United States was not knocked out of the Pacific within six months of the Pearl Harbor attack, a year at the most, the balance of power would shift. Having studied at Harvard earlier in the century and traveled about the country, he had come to know America's people and her industrial might.

The Americans won at Midway and, as it turned out, the Aleutians did not play a decisive role. While this campaign may be a mere footnote to history, it is nonetheless a fascinating one. Rourke has done a good job of assembling maps and photographs of the campaign, which make his already well-written narrative easier to follow. Small defects sometimes mar this book's scholarship; for example, referring to Army General Simon Bolivar Buckner as Simon Bolivar Butler. But such flaws do not detract from the overall contribution the book makes to understanding what has come to be called "the Thousand Mile War."

Typewriter Battalion: Dramatic Front-Line Dispatches from World War II. **Edited by Jack Stenbuck. William Morrow, 1995. 397 Pages. 23.00.** Reviewed by Lieutenant Colonel Albert N. Garland, U.S. Army, Retired.

Beginning probably in 1944, the late Jack Stenbuck, an old-line print journalist himself, began collecting newspaper columns about the war that he considered special. Each had been written by a top-rated print journalist who was with an Allied army, navy, or air force unit. These journalists, many of whom were still at the front in various theaters of operation, had served with the fighting men and knew what war was all about. Many of them had been foreign correspondents; some had covered other wars before this, "the big one."

Stenbuck apparently intended to publish the columns in anthology form but died before he could do so, in 1975. When his wife died in 1992, his son and daughter discovered various uncompleted manuscripts, including this one. The siblings—Jerry and Nancy—set about preparing this manuscript for publication as a tribute to "the great journalists of World War II" and in particular to the 32 members of the U.S. press who died while covering the war.

These columns will bring back vivid memories of particular events to the millions of surviving World War II veterans in this country. Some will certainly remember Ernie Pyle and his magnificent column titled "The Death of Captain Waskow," datelined Italy, 10 January 1944. Others will recall Richard Tregaskis, who covered the war both in the Pacific and in Europe, as well as Ross Munro, Walter Cronkite, John Lardner, Bob Considine, Richard Strout, and the dozens of others whose names appear in this book. One female correspondent is accorded a place in this anthology—Catherine Coyne, whose column was titled "The German Women Haven't Quit."

Writings such as these are often referred to as "instant history," and so they are. Military historians turn to such writings to flesh out their more scholarly studies, and to get a feel for the people and the times.

All of today's readers who work their way through the dozens of columns in this book will gain a far better appreciation of what the war was really like for the soldiers of earlier wars.

United States Army Logistics: The Normandy Campaign, 1944. **By Steve R. Waddell. Greenwood Press, 1994. 190 Pages. $55.00.** Reviewed by Lieutenant Colonel Harold E. Raugh, Jr., U.S. Army.

Logistics in general has been an unglamorous aspect of combat and military planning, usually overshadowed by operations on the ground. This is ironic, because the success of military operations frequently depends upon logistics. In few cases has this been more true than in Operation *Overlord*—the Allied invasion of continental Europe in June—and the subsequent breakout and pursuit across France.

Although it is recognized that the initial landings achieved surprise and hard-fought success, few realize that logistical plans for the operation barely survived contact with the enemy. The author, an assistant professor of history at the United States Military Academy, says, "As the invasion succeeded and the battle for Normandy intensified, logistical planners dealt with a supply system that achieved much but failed to operate as planned." These shortcomings were due to a cumbersome, frequently overlapping system of logistical commands, elements, and staff sections; port and supply point congestion; and "a serious error" in overlooking or underestimating the effect of the terrain and impact upon operations of the hedgerows in Normandy.

There were supply shortages, especially in ammunition, during the bocage fighting. The breakout from Normandy generated a new set of logistical difficulties, including fuel shortages and increasing distances from the ports. Throughout the campaign, the planning shortfalls and distribution problems led to supply shortages. In the end, the author says, "the American supply system in Europe did move millions of tons of cargo and performed well enough to support an Allied victory." And this is the important part.

This slim but important volume is superbly researched and well written. It includes five charts, six maps (although without distance scales or direction indicators), and five photographs. Each of the seven chapters contains excellent tables and bar graphs and detailed endnotes. The bibliography is very complete, including numerous references for further research.

This excellent book will certainly inform, or remind, readers that it takes much more than a grease pencil on an operations overlay to conduct military operations. In the Normandy campaign, "the Army Service Forces often functioned at less-than-peak efficiency and encountered difficulties that should have been anticipated." Fortunately, the U.S. Army apparently learned the lessons it needed to learn from that campaign.

Commando! The M/Z Unit's Secret War Against Japan. By A.B. Feuer. Praeger, 1996. **208 Pages. $55.00.** Reviewed by Michael F. Dilley, Davidsonville, Maryland.

Australian independent companies and Z Force units played a small but important role in the fighting in the southwest and far Pacific areas during World War II. Initially

an Australian operation, control of these and other units was taken over by the Allied Intelligence Bureau when General Douglas MacArthur decided he didn't want the British Special Operations Executive and U.S. Office of Strategic Services operating in his theater. It is hard to find descriptions of these units, let alone histories of them, and A. B. Feuer's *Commando! The M/Z Unit's Secret War Against Japan* fills some of that gap. It is an excellent retelling of behind-the-lines operations by daring teams of saboteurs and special operators.

In late 1941 and early 1942, the control mechanism for special operations in the Pacific area went through several name changes, as did some of the operational elements. The longest lasting (and probably most familiar) of the operational names is Z Unit or Z Force. This force consisted of small infantry units made up of volunteers who underwent special selection and training before being assembled into teams and sent on missions throughout the target area. The Z Units were delivered by a variety of seaborne means: submarines (both conventional and mini-), PT boats, collapsible boats and even a captured fishing vessel. Their missions fell into three general categories—raiding specific targets, raising and training a guerrilla force, and gathering intelligence. Occasionally a unit in place was sent out to recover a downed aircrew or to assist local Coastwatchers.

Feuer has neatly arranged the contents of his book to tell the stories of several "typical experiences," relying on extracts from personal interviews with participants as well as from the official written accounts of the various operations. Whenever possible, he uses the first-person words of these participants to evoke a more personal feeling about the developing action.

A section at the end—an extract from an after-action account of a downed flier's experiences during his evasion—may at first seem unrelated to the operations of Z Unit. But this account serves the author's purpose very well in discussing both life with the friendly people in the area and life on the run from the pursuing Japanese. The pilot's eventual rescue after more than eight months in the jungle is an excellent ending for the book.

Commando! is easy to read because Feuer makes sure there are no slow-down points in the stories. He does an outstanding job of cutting from first person to third person, thereby keeping the action moving. His sketch maps are placed to provide a ready reference in the narrative. Altogether, this is a first-rate book, one I particularly recommend to military history students and enthusiasts. Although the price is high, in this case, it is worth spending.

Marching Through Georgia: The Story of Soldiers and Civilians During Sherman's Campaign. **By Lee Kennett. HarperCollins, 1995. $27.50. 418 Pages.** Reviewed by Major Don Rightmyer, U.S. Air Force, Retired.

Two excellent histories have been published in recent years about the Atlanta and Georgia campaigns of General W.T. Sherman during 1864. The more traditional of the two books is Albert Castel's *Decision in the West: The Atlanta Campaign of 1864* (University Press of Kansas, 1992). This is the most comprehensive military history yet published on that campaign, prepared by one of the most highly respected historians in the Civil War field today. The second book, published in 1995, is *Marching Through Georgia*, written by historian Lee Kennett. (Although this is his first Civil War history, Kennett has written several well-received histories on the military and civilian aspects of World War II.) These two studies complement each other and will provide any reader with an excellent appreciation for Sherman's 1864 campaigns.

Kennett's work follows the movements of Sherman's three armies (Tennessee, Ohio, and Cumberland) as they began their movements from Chattanooga in mid-1864. His treatment of this portion of the Civil War action, from the initial steps into Georgia territory until the capture of Savannah, takes more of a social history approach, looking at the realities of war for all those present at the time: Union and Confederate soldiers as well as the civilian and refugee inhabitants of Atlanta and numerous villages and homesteads throughout the state.

Castel's history offers a detailed rendering of the military movements and operations under the command of Sherman, Johnston, and Hood. Kennett's work, on the other hand, provides an enlightening view of the experiences of those who fought, observed, and suffered from the consequences of war during this time. If it was possible (and it was), the war had taken on an even more complex and serious military aspect as the troops routinely used barricades and fortifications each day as they took new positions. Often, the rails and wood used in reinforcing trenches came form the fields of nearby farms. Of course, that damage was minor compared to the destruction suffered by many of the homes and farms throughout the campaign.

Kennett provides an evenhanded appraisal of General Sherman and his military operations. Along with military actions, there were certainly other actions that were considered extreme by civilians whose produce, livestock, and poultry were requisitioned for use by the Union or Confederate armies. And this book adds the flesh-and-bones reality of what war was like for everyone—combatants and civilians alike.

Marching Through Georgia should not be considered representative of the experiences of soldiers and civilians in every section of the country where the armies traveled and fought. But it does provide an excellent grasp of what life was like for many inside the city of Atlanta and the state of Georgia during the latter half of 1864.

Pay Any Price: Lyndon Johnson and the Wars for Vietnam. **By Lloyd C. Gardner. Ivan R. Dee, 1995. 610 Pages. $35.00.** Reviewed by Dr. Joe P. Dunn, Converse College.

I approached this book with some suspicion. How many more books do we have on Lyndon Johnson's handling of Vietnam? Like all the recent books, the dust jacket on this one says that the volume uses recently declassified materials from the Johnson Library. Although Lloyd Gardner is a very good historian, his past leftist orientation raised questions in my mind. The effusive blurb on the dust jacket by a radical scholar known for quite ideological work on the war didn't reassure me. Nevertheless, this is a very good book, a balanced, insightful blending of political biography and diplomatic history and one of the most readable books on the topic in print.

The images of Lyndon Johnson and the interpretation of his conduct of the Vietnam War cover a wide spectrum. The problem is that Johnson was so multi-dimensional, a conflicting mosaic from one minute to the next, that he was often a caricature of himself. Depending upon which evidence one highlights, one can make a case for almost any view of Johnson and his handling of the war. The only Johnsonian consistencies were his vanity, his energy, and his pompous conviction and insecurity. Many authors have touched parts of this mosaic, and so does Gardner. The Johnson who emerges in this volume is anguished and conflicted, but in charge. Gardner suggests that, to some degree, Vietnam was a moral

drama played out in Johnson's tortured mind and conscience.

Beyond trying to understand and assess Johnson, Gardner provides fresh insights into the other major players, including McNamara, Rusk, Rostow, Ball, and Clifford, to name a few. In addition, he provides glimpses into the role of the so-called Wise Men and of former President Dwight D. Eisenhower as they all provided input into the decision process centered in Johnson. The book is a good introduction to the complexity of the formal and informal advisory system, as employed and misemployed by the President, and the intra-administration battle to control Johnson's Vietnam soul. Gardner focuses especially on how the Kennedy men within the Johnson administration continued to treat Vietnam as "crisis management," to be conducted successfully in the Cuban Missile Crisis mode. Finally, he does an excellent job of depicting the interplay of domestic and foreign policy priorities.

With new perspectives on decision making at the time of the Gulf of Tonkin incident, cooperation with the Soviet Union concerning the Vietnam theater, and dealing with our Vietnamese allies, this is a very interesting and provocative addition to the literature. I recommend it highly.

High Command: The Genius of Generalship from Antiquity to Alamein. **By John Laffin. Barnes & Noble, 1995. 304 Pages. 1995.** Reviewed by Lieutenant Colonel Harold E. Raugh, Jr., U.S. Army.

Studies of military leadership and generalship are currently very popular. Although *High Command* may seem to be a new addition to the genre, one finds upon closer observation that it is a republication of the author's well-received 1966 *Links of Leadership*. Nevertheless, the earlier book has been out of print for many years, and its reappearance deserves to be brought to the attention of military readers.

The "links of leadership" of the original title, according to author John Laffin—a prolific historian and World War II combat Infantry leader—refers to "Great generals [who] are the links in my chain of leadership, while the chain itself is made up of their collective experience, transmitted from one commander to the next by the reading, study, and appreciation of military history."

Beginning with Gideon and his innovative victory over the Midianites about 1200 B.C., Laffin highlights significant battles, including Marathon, Cannae, Teutoburger Wald, Crecy, Breitenfeld, Naseby, Leutehn, Austerlitz, Solferino, and (Second) Alamein. This book is not, however, a compilation of disjointed battle studies but a continuous chronology, emphasizing these battles, the evolution of military theory and tactics, the relationship of technology, and the effect of these factors upon the practice of generalship.

The theme of this study is that great generals, while commanding at a unique time in history, share with their predecessors "an intangible but powerful and enduring philosophy of command." This assertion is true, as the human element of leadership, in spite of tactical and technical progress, has remained relatively constant.

The evolution of warfare, according to the author, has generally been progressive, with great captains, based on historical precedence, thinking out tactical innovations before executing them. But they have also looked into history to learn from their forebears. World War I, however was an exception: "Generalship was obstinate, criminally stupid, ridiculously rigid, almost totally unenterprising, pathetically feeble, and absolutely inhuman." The battles and leaders selected for study are generally sound, although the selection of Montgomery as the prototype great general of World II may be arguable.

Laffin says that those generals who have experienced notable success frequently have done so by studying the campaigns of their predecessors, "profiting by their mistakes, capitalizing on their successes." This advice is timeless and particularly sound, as is this book, for company grade infantry officers and noncommissioned officers.

RECENT AND RECOMMENDED

Wonderful Flying Machines: A History of U.S. Coast Guard Helicopters. **By Barrett Thomas Beard. 280 Pages. $32.95.**

No Victor, No Vanquished: The 1973 Arab-Israeli War. **By Edgar O'Ballance. Originally published in 1978 with the sub-title *The Yom Kippur War.* Presidio, 1997. 384 Pages. $16.95, Softbound.**

Citizen Warriors: America's National Guard & Reserve Forces and the Politics of National Security. **By Stephen M. Duncan. Presidio, 1997. 336 Pages. $24.95.**

The Grim Reaper: Machine Guns and Machine-Gunners in Action. **By Roger Ford. Sarpedon, 1997. 320 Pages. $22.95.**

Tank Killing: Anti-tank Warfare by Men and Machines. **By Ian Hogg. Sarpedon, 1997. 288 Pages. $22.95.**

Follow Me I: The Human Element in Leadership. **By Gen. Aubrey "Red" Newman. Originally published in 1981. Presidio, 1997. 342 Pages. $15.95, Softbound.**

Follow Me II: More on the Human Element in Leadership. **By Gen. Aubrey "Red" Newman. Originally published in 1992. Presidio, 19997 304 Pages. $15.95, Softbound.**

Follow Me III: Lessons on the Art and Science of High Command. **By Gen. Aubrey "Red" Newman. Originally published in 1987 with title *What Are Generals Made of?* Presidio, 1997. 342 Pages. $15.95, Softbound.**

The Admiral's Baby: An Extraordinary Episode in Twentieth-Century History. **By Laurens van der Post. William Morrow, 1997. 340 Pages. $27.00.**

Reluctant Warrior: A True Story of Duty and Heroism in Vietnam. **By Michael C. Hodgins. Ballantine, 1997. 330 Pages. $25.00.**

Lincoln's Foreign Legion: The 39th New York Infantry, The Garibaldi Guard. **By Michael Bacarella. White Mane (P.O. Box 152, Shippensburg, PA 17257), 1997. 330 Pages. $34.95.**

A Very Long Weekend: The Army National Guard in Korea, 1950-1953. **By William Berebitsky. White Mane (P.O. Box 152, Shippensburg, PA 17257), 1996. 293 Pages. $29.95.**

Dark Eagles: A History of Top Secret U.S. Aircraft Programs. **By Curtis Peebles. Presidio, 1995. 400 Pages. $17.95, Softbound.**

The War in the Pacific: From Pearl Harbor to Tokyo Bay. **By Harry A. Gailey. Originally published in 1995. Presidio, 1997. 560 Pages. $18.95, Softbound.**

Clear the Bridge! The War Patrols of the U.S.S. Tang. **By Richard H. O'Kane, Rear Admiral, USN. Originally published by Rand McNally, 1977. Presidio, 1997. 480 Pages. $17.95, Softbound.**

Death on a Distant Frontier: A Lost Victory, 1944. **By Charles Whiting. Sarpedon, 1996. 256 Pages. $21.95.**

The Anglo-Boer War: The Road to Infamy 1899-1900. **By Owen Coetzer. Sterling, 1996. 294 Pages. $24.95.**

The Great War: And the Shaping of the 20th Century. **By Jay Winter and Blaine Baggett. Penguin, 1996. 432 Pages. $40.00.**

Strategic Exposure: Consequences of Proliferation Around the Mediterranean. **By Ian O. Lesser and Ashley Tellis. Rand, 1996. 130 Pages. $15.00, Softbound.**

Arms Proliferation Policy: Support to the Presidential Advisory Board. **By Marcy Agmon, James L. Bonomo, Michael Kennedy, Maren Leed, Kenneth Watman, Katherine Webb, Charles Wolf, Jr. Rand, 1996. 178 Pages. $20.00, Softbound.**

Adolf Galland: The Authorised Biography. **By David Baker. Windrow & Green, Great Britain. Combined Books, 1996. 248 Pages. $27.95, Hardcover.**

The March on London. **By Charles Whiting. Imprint of Pen & Sword Books, Ltd. Combined Books, 1997. 256 Pages. $16.95, Softbound.**

Werewolf. **By Charles Whiting. First published in Great Britain by Redwood Books, 1972.. Combined Books, 1997. 208 Pages. $16.95, Softbound.**

Blood and Water: Sabotaging Hitler's Bomb. **By Dan Kurzman. Henry Holt, 1997. 274 Pages. $27.50.**

From the Editor

LESSONS WORTH REMEMBERING

Success in the profession of arms often lies upon an understanding—and application—of the lessons of history. This application can be as simple as recognizing others' mistakes and not repeating them, or as complex as assimilating the strategy, tactics, and techniques of successful commanders and applying them to the problem or campaign at hand. In the coming months, *Infantry* will run a series of articles, each discussing one of the lessons we have seen repeated throughout history. Some may focus on one or more of the principles of war, while others will illustrate commonsense tactics that bear reiteration. These will include examples of the results that will follow from either the ignorance or application of the principle.

For example, three years after the deaths of Lieutenant Colonel George Armstrong Custer and his 211 men at Little Big Horn, only 55 soldiers survived out of a British regiment of 1,800 men when they were surrounded and attacked by the Zulus at Isandhlwana. In the first instance—long before we had even codified the principles of war—the chiefs Sitting Bull, Crazy Horse, and Gall effectively employed mass and surprise—among others—to achieve victory, while the Zulu king Cetewayo later applied them to even greater effect. (These warriors may not have had the tacticians' terminology to help them, but they knew what did and did not work in battle.) On the negative side, Custer's lack of accurate intelligence on the enemy forces' intent and disposition—and his own overconfidence—contributed to the U.S. Army's worst defeat in Indian warfare, while Lord Chelmsford's underestimation of Cetewayo and his Zulu impis (regiments) cost the British close to 2,000 of their finest soldiers. Such losses have been repeated throughout history—often avoidably and to an even greater degree.

But we have learned. Prior to Operation DESERT STORM, Coalition commanders and staffs reviewed the desert operations of past wars, paying close attention to the logistical and tactical problems that had plagued Eisenhower, Rommel, and Montgomery. Even the debilitating effects of poor field sanitation by Afrika Korps units did not go unnoticed, and as a result Coalition forces were spared the outbreaks of disease that had stripped Rommel's command of much of its essential combat power.

Today, the U.S. Army is closely engaged in stability and support operations around the world, and the potential for treachery, ambush, and betrayal accompanies the often humdrum routine of our soldiers' daily duties. We cannot afford to let our guard down for a moment, however, and that is why we will be running the series I have mentioned. The first article will be based upon the diary of a Private in the 9th Infantry who saw action in China during the Boxer rebellion and later in the Philippines during the Philippine Insurrection. It makes good reading, and the lessons are there for those who wish to include them in their own professional development.

As always, we welcome reader input. If you have a good lesson you want to share with the combined arms force, this is the time. It may seem too short, and you may not think it's significant enough for the rest of us, but if you've remembered it this long it's probably worth sharing. Meanwhile, keep up the good work, and watch your lane!

RAE

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